# MANUFACTURERS RECORD

#### Irreconcilable

WITH the approval of the whole free world, the United States has insisted, as an essential condition to an armistice in Korea, that those North Korean and Chinese prisoners who do not wish to return to their countries be not compelled to do so.

In our own country, however, the United States government, while it outlaws the "closed shop" for labor unions, permits the "union shop" which compels American citizens to join the dominant union within thirty days of securing a job in order to hold it.

Is the philosophy of the labor boss who demands a closed or union shop any different from that of the Communists who demand the return of Korean war prisoners against their wishes? And how can our federal government possibly reconcile its stand for their political freedom with its approval of economic dictatorship for some of its own citizens?

# **CONNORS** Bars Fit The Job—And Save You Construction Time



#### DETAILING

Connors' service includes placing drawings, when needed, prepared by experienced engineers—a time saver to the builder.



#### **FABRICATION**

Bars arrive at the job cut to proper length and bent to fit job requirements. Each bar is metal tagged for easy identification.



#### QUICK DELIVERY

Connors, located in the heart of the South's steel industry, gives you quick delivery. Accessibility of truck and rail facilities insure dependable service.



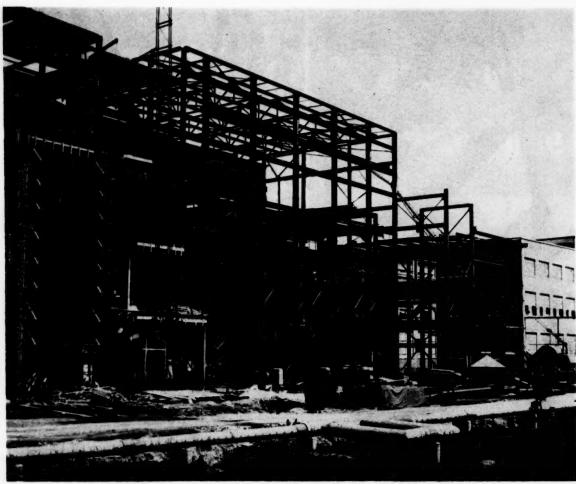
#### **CONNORS PRODUCTS**

Concrete Reinforcing Bars Hot Rolled Strip Merchant Bars Special Sections

#### **CONNORS STEEL DIVISION**

H. K. PORTER COMPANY, INC.
OF PITTSBURGH
P. O. BOX 2562 • BIRMINGHAM, ALA.





## Building in the SOUTH

Part of a major addition to the Southern Paperboard Co. plant, Port Wentworth, Ga. J. E. Sirrine & Co., engineers. The 700 tons of structural steel were fabricated by O'NEAL.

Like many growing Southern industries, the Southern Paperboard Co. needed more space in a hurry. Space for industrial expansion is plentiful in the South . . . space to build and grow, space to work and breathe. The South has a warm, favorable climate. What industry needs, the South has in abundance. Add up all the advantages and it's evident why the industrial trend is South.

Industries that have seen the advantages have moved into the South to stay. Therefore, they build to last—build with STEEL.

O'NEAL STEEL WORKS

Birmingham 2, Ala.



## MANUFACTURERS RECORD

Devoted to the Industrial Development of the South and Southwest



Volume 122

May 1953

Number 5

Business Trends	7
New and Expanding Plants	13
Little Grains of Sand	18
Editorial	25
Readjustment in Securities Markets Erases Post Election Day Advance By Robert S. Byfield	26
Inventories Increase Faster Than Sales	27
Aluminum Leads, Promotes Diversity in Arkansas' Industrial Growth	28
Peace Feelers Stimulate Competition, Spotlight Planning and Cost Cutting	30
The Dock That Jack Built	32
Management Looks At Waste  By James F. Crist	34
South's Construction Totals For April	36
Industrial Expansion	38
Delta-C&S Operating As Nation's Fifth Largest Domestic Airline	40
Southerners at Work	41
New Products	44
Who's Where	55
Business Notes	56
Financial Notes	57
Index For Buyers	64
Index Of Advertisers	66

#### MANUFACTURERS RECORD PUBLISHING CO.

Publishers of Manufacturers Record, Construction, Daily Construction Bulletin and Blue Book of Southern Progress.

Frank Gould, President Wm. M. Beury, Vice President

C. J. O'Donnell, Treasurer

Richard R. Harwood, Jr., Mgn. Editor Wm. M. Beury, Editor Caldwell R. Walker, Editor, Business Trends . Samuel A. Lauver, News Editor Robert S. Byfield, Financial Editor Sidney Fish, Industrial Analyst

#### **PUBLICATION AND BUSINESS OFFICES**

109 MARKET PLACE, BALTIMORE 3, MARYLAND F. O. Schroeder, Southern Business Mgr. Baltimore Office. R. S. Kendrick, 1430 Clairmont Rd., Decatur, Ga., Tel. Crescent 4577 J. E. Eierman, Circulation Mgr.

"The Manufacturers Record," published monthly by Manufacturers Record Publishing Co., 109 Market Place, Baltimore 3, Md. Entered as second class matter at Baltimore, Md., under the act of March 3, 1879. Volume 122, No. 5. Single Copies 35c. Back Numbers over three months old, 50c. Copyright May 1953 by Manufacturers Record Publishing Co., all rights reserved.

## Rolling Doors



## TIME and MON

Kinnear Rolling Doors are tailored to fit each individual opening, in old or new buildings. Coiling neatly above the lintel, they open straight up can't interfere with traffic or plant activities. A half-century of use under the most difficult conditions gives complete proof of the Kinnear Door's capacity for extra years of service.

They save money! Kinnear's rugged, all-steel, interlocking slat curtain assures long life, low maintenance costs, and extra protection against fire, intrusion, or wind damage. Slats are heavily zinc-coated by the hot-dip process, and a special Kinnear Paint Bond assures lasting paint adhesion.

They save space! All floor and wall space around the door remains fully usable at all times.

They save time with smooth, easy, gliding action. With motor operation, doors can be controlled by push-button, from convenient locations.

Write for your copy of new catalog.

#### The KINNEAR Mfg. Co. FACTORIES:

1600-20 Fields Ave., Columbus 16, Ohio 1742 Yesemite Ave., San Francisco 24, Calif. Offices and Agents in Principal Cities

Saving Ways in Doorways

### Fire Protection for New Food Warehouse



The 50,000-gal. Horton Watersphere shown above was installed to provide water for fire protection at the new Junket Brand Foods warehouse at Little Falls, N. Y. The Watersphere serves as the sole source of water for the automatic sprinkler system. If a fire should break out, water will flow by gravity from the Watersphere through the first sprinkler heads that open and quench the flames before they gain headway.

Automatic fire protection with a gravity water supply is economical as well as dependable. Company

officials estimate that the Junket warehouse system will pay for itself in a few years through savings in insurance premiums alone.

Modern, attractive Waterspheres are built in standard capacities from 25,000 to 250,000 gallons. Other Horton elevated steel tanks are built in capacities from 5,000 to 3,000,000 gallons. For estimates or quotations, please write our nearest office. State capacity desired, location, height to bottom and type of insurance carried. (Stock, Mutual or F.I.A.)

#### CHICAGO BRIDGE & IRON COMPANY

PLANTS IN BIRMINGHAM, CHICAGO, SALT LAKE CITY AND GREENVILLE, PENNSYLVANIA

## Business Shows No Signs of Slackening

#### THE NATION

Due mainly to fewer number of working and trading days, total business volume in the United States was somewhat lower in February than in January.

Preliminary reports indicate, however, that April will show a higher total than either of the two preceding months.

Thus, the Nation's business continues to remain at a very high rate with little indication of change in either direction.

Forecasts made by both business leaders and economists seem to agree that the pace now being set will continue throughout the current year.

High as current sales are, they are running slightly behind output of goods and services.

Inventories are up some \$300 million in February over January, and up \$1,100 million over February 1952.

Industrial activity (manufacturing, construction and mining) is still rising and making new high records almost every month.

Distribution is keeping pace with heavier industry, with retail and wholesale sales from 10 to 20 per cent above a year ago.

Passenger automobiles are being turned out at the rate of 6.5 million units a year, nearly half again as many as at this time last year.

Only weak spot in either National or Southern economy appears to be in mining where coal production is running considerably below last year's rate and petroleum extraction also shows signs of decline.

Construction continues its previous brilliant performance and leads all heavy industry in gains over last year. This despite some signs of weakness in the homebuilding markets where older types of houses are down from 5 to 20 per cent in value from a year ago.

Prices have remained practically unchanged as a general average for a good number of months, further reflecting the delicate balance that currently exists between supply and demand.

#### ON THE UPWARD SIDE

Nearly all forecasts being made, whether from governmental or industrial source, are strongly bullish for the remainder of the current year.

Business in general is so optimistic that plans for investment in new plant and equipment run higher now than a year ago, and total expenditures for such purpose are expected to top 1952 by from one to two billion dollars. Among the spenders, utilities expect to spend by far the greatest portion, with manufacturers planning to about balance last year's outgo, and other segments planning modest increases.

March was the first month in history in which output of steel exceeded 10 million tons. New production records were set during the month, week by week.

Employment, already at record levels, is still moving up. Unemployment, already at the lowest level since the end of World War II, is still headed downward.

Current Corporate net working capital stands at an all time high, promising funds for intensive promotional campaigns if or when sales show sign of lagging.

#### ON THE DOWNWARD SIDE

Few are the signs of business decline.

The few that have put in appearance, however, are receiving increased attention.

Right now urban business is faring considerably better than rural. The time has come when the pinch is being put on farmers in several directions. Experience proves that prosperous farms are a main ingredient to sustained business activity.

Inventories, while not unwieldy, continue to build up, and to the extent that they do, represent excess of supply over immediate demand. Since a year ago, inventories of all types have increased by a billion dollars.

Swiftly growing consumer credit also registers warning of waning effective demand. Nearly one-third of all retail purchases are now being made on credit, with over fifty per cent of all automobiles being bought on that basis. So long as incomes remain high, this situation is not likely to be a matter for concern, but should some other element initiate a business lag, the lack of consumer liquidity might cause serious trouble.

Right now the demand for credit of all types is in excess of available supply. As a result, interest rates are tightening and many applicants are meeting with lender resistance.

Collection rates at department stores are definitely slower than a year ago. This is particularly true of charge accounts, with instalment payments holding fairly steady.

In toto these conditions add up to a buyers' market, or approach of one. This in itself, however, could be a healthy rather than undesirable symptom, and there is nothing in the current situation to indicate immediate or early trouble.

(Continued on page 9)



 $B_{\rm ELOW}$  the off-shore waters of the Gulf of Mexico, and the lakes, rivers and bayous of picturesque southeastern Louisiana, lie rich reserves of natural gas  $\dots$  nature's "perfect fuel."

To bring large quantities of this natural gas supply to homes and industries along its growing system, Southern Natural Gas Company is spending more than \$32,000,000.

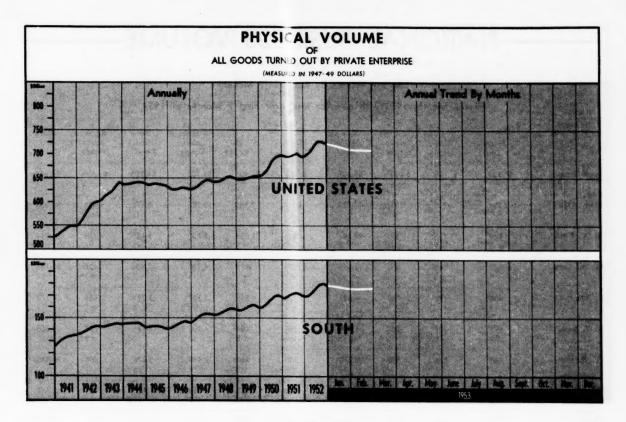
Some 400 miles of big steel pipe will connect this new gas supply to the Company's present system which also gets gas from other fields in Texas, Louisiana and Mississippi.

Construction has already begun on the \$32,000,000 southeastern Louisiana supply system which is a part of Southern Natural Gas Company's current \$76,000,000 expansion program.

Completion of the proposed expansion program will extend the Company's system into South Carolina and to Savannah on the eastern seaboard. It will boost daily delivery capacity from the present 710 million cubic feet to over a billion cubic feet.

This expansion is necessary to keep pace with the dramatic progress of the southern states which Southern Natural Gas Company is privileged to serve with this "perfect fuel".

## SOUTHERN NATURAL GAS COMPANY



#### Regional Indicators

(Continued	from	nage	7)

Farm Marke	etings (\$	Mil.)		Constru	iction (\$	Mil.)		
	Feb.	Jan.	Feb.		Feb.	Jan	a.	Feb.
	1953	1953	1952		1953	195	3	1952
South	\$ 446	\$ 758	\$ 508	South	\$ 809	\$ 8	50	\$ 693
Other States	\$1,426	\$2,181	\$1,502	Other States	\$1,416	\$1,5	10	\$1,280
United States	\$1,872	\$2,939	\$2,010	United States	\$2,225	\$2,3	60	\$1,973
Mineral O	itput (\$	Mil.)		Manufac	turing (	\$ Mil.		
	Feb.	Jan.	Feb.		Feb.	Ja		Feb.
	<b>195</b> 3	1953	1952		1953	198	53	1952
South	\$ 576	\$ 583	\$ 573	South	\$ 5,080	\$ 5,0	81	\$ 4,571
Other States	\$ 493	\$ 497	\$ 489	Other States	\$18,184	\$18,1	12	\$16,017
United States	\$1,069	\$1,080	\$1,062	United States	\$23,264	\$23,1	93	\$20,588
			National	Indicators				
	Feb.	Jan.	Feb.			Feb.	Jan.	Feb.
	1953	1953	1952			1953	1953	1952
Personal Income (\$ Bil.)	. \$ 280.4	\$ 280.6	\$ 263.5	Ave. Weekly Hours (Mi	fg.)	41.0	41.1	40.7
Ave. Weekly Earnings (Mfg.	\$ 71.42	\$ 71.51	\$ 66.91	Carloadings		2,731	3,352	2,911
Consumer Credit (\$ Mil.) .	. \$ 23,521	\$ 23,676	\$ 19,717	Consumer Prices ('47-'4	9=100)	113,4	113.9	112.4
All Inventories (\$ Mil.)	. \$ 74,969	\$ 74,619	\$ 73,829	Retail Prices ('35-'39-1	00)	207.8	209.0	208.9
Mfg. Inventories (\$ Mil.) .	. \$ 43,865	\$ 43,766	\$ 43,168	Wholesale Prices ('47-'4	9=100)	109.6	109.9	112.5
Trade Inventories (\$ Mil.)	. \$ 31,104	\$ 30,853	\$ 30,661	Construction Costs ('47-	49=100) .	122.6	122.8	118.3
Bank Debits (\$ Mil.)	. \$117,276	\$132,786	\$114,114	Electric Output (mil. kw	. hrs.)	39,165	42,656	36,766
				(Conti	nued on pe	ige 10)		

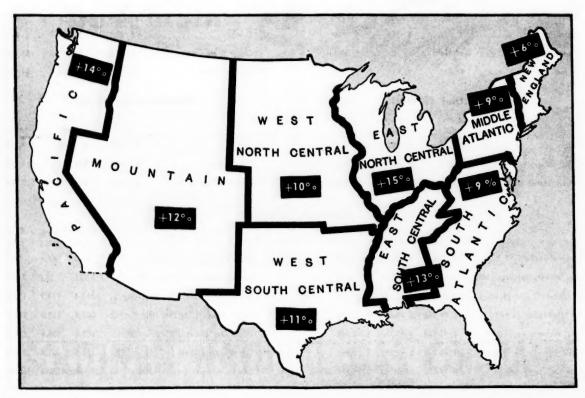
## NATIONAL BUSINESS VOLUME-

(Continued from page 9)

#### Business Volume By Regions (\$ Million)

#### First 2 Months 1953 with gain (or loss) over First 2 Months of 1952

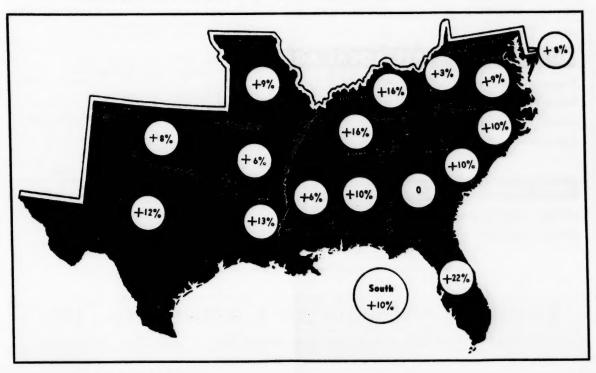
	Farm-	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
New Eng.	\$ 139 +1%	\$ 8 even	\$ 232 even	\$3,335 +9%	\$ 302 even .	\$ 401 +4%	\$1,722 even	\$1,750 +15%	\$ 300 +3%	\$8,189 +6%
Mid. Atl.	336 +2%	211 -9%	836 +4%	11,028 +10%	1,460	1,548	10,783	5,172 +11%	1,476 even	32,850 +9%
E. N. Cen.	919 —1%	165 —9%	<b>891</b> +15%	14,641	1,246 +2%	1,009	<b>8,231</b> +17%	5,659 +12%	1,153 +6%	33,914 +15%
W. N. Cen.	1,443 +5%	165 +5%	335 +4%	3,516	598 +1%	429 +4%	4,106 +13%	2,454 +9%	<b>420</b> +7%	13,466 +10%
S. Atl.	<b>408</b> —9%	198 —10%	<b>765</b> +9%	<b>4,508</b> +9%	<b>726</b> +2%	<b>545</b> +8%	3,222 +9%	3,284 +16%	<b>556</b> +5%	14,212
E. S. Cen.	399 +6%	127 —14%	<b>268</b> +28%	1,849 +12%	285 even	186	1,708 +18%	1,321 +19%	222 +3%	6,365 +13%
W. S. Cen.	447 —12%	816 +8%	<b>533</b> +19%	2,830 ,+10%	569 +1%	367 +5%	2,495 +17%	2,370 +16%	<b>408</b> +7%	10,835
Mount.	347 —3%	<b>253</b> +7%	178 +7%	<b>704</b> +13%	<b>246</b> +3%	125 +8%	<b>851</b> +22%	898 +16%	165 +7%	3,767 +12%
Pacif.	517 —3%	206 even	<b>547</b> +15%	<b>4,046</b> +16%	645 +5%	<b>558</b> +8%	<b>3,274</b> +20%	2,743 +18%	667	13,203
U. S.	<b>4,955</b> even	2,149 even	<b>4,585</b> +10%	46,457 +13%	6,077 +1%	5,168 +5%	36,392 +14%	25,651 +14%	5,367 +4%	136,801



## SOUTHERN BUSINESS VOLUME-

Business Volume by States (\$ Million)
First 2 Months of 1953 with gain (or loss) over First 2 Months of 1952

	Farm ing		Min- ing	Con- struc- tion	Ma fact in		Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
Ala.	\$ 53 —8		\$ 22 25%	\$ 64 even	\$ 5	16 +8%	\$ 78 even	\$ 54 +8%	\$ 317 +14%	\$ 341 +25%	\$ 54 even	\$1,499 +10%
Ark.	56 32		19 even	35 even		162 +8%	44 even	<b>22</b> +8%	161 +21%	213 +15%	. 30 even	742 +6%
D. C.		70	_	39 —7%	91	40 ven	46 +4%	62 even	272 +8%	275 +12%	54 even	788 +6%
Fla.	102		12 even	153 +28%		248	106 even	98 +16%	535 +30%	602 +27%	106	1,962
Ga.	60 —27	1	6 even	78 -6%		690 +8%	104	78 +5%	476 —14%	449 +20%	86 +2%	2,027 even
Ky.	178 +12		73 —15%	78 +56%		540 -10%	84 even	43 +13%	506 +23%	363 +17%	58 +2%	1,923
La.	58 +3		133 +3%	114 +80%		<b>525</b>	II7 even	54 even	375 +13%	362 +10%	58 +3%	1,796 +13%
Md.	36 ever	,	3 even	95 +4%		707 - 10%	105	<b>88</b> +3%	461 +8%	427 +11%	70 +1%	1,992
Miss.	68		<b>22</b> —8%	35 +29%		186	37 even	22 +1%	181 +5%	185 +10%	28 even	764 +6%
Mo.	14! —1		18 -5%	+21%		.094 +15%	189 +2%	147 +2%	1,390 +10%	695 +10%	148	3,937
N. C.	I	)	4 even	155 +18%		143 +8%	105 +5%	67 +5%	621 +11%	. +16%	80 +2%	2,736 +10°
Okla.	8		104 +8%	57 even		310 +7%	73 +1%	48 even	328 +13%	329 +13%	58 even	1,392
S. C.		9	2 even	108		482 +7%	40 even	28 +2%	196 +13%	266 +15%	38 +3%	1,189 +10°
Tenn.	10		10 —20%	91 +35%		607	86 even	67 +5%	704 +13%	<b>432</b> +20%	<b>82</b> +10%	2,179 +16°
Tex.	24	8	560 +9%	327 +12%	1	,833 +8%	335 +2%	243 +5%	1,631	1,466	262 +11%	6,905 +12°
Va.	7		22 15%	94		770 +9%	123 +2%	77 +2%	399 +15%	465 +16%	74 +2%	2,103
W. Va.	2		149	25 even	-	308 +4%	76 even	28 +3%	188	229 +2%	38	1,066
South	1,38		1,159	1,659		1,161 +10%	1,748	1,226	8,741	7,600 +16%	1,324 +5%	35,000



## Market Place

## FOR INDUSTRIAL SERVICE

In cooperation with over 500 members of the Society of Industrial Realtors and other industrial specialists conveniently located throughout the United States, we offer you a nation-wide industrial service.



Plant acquisition
Industrial disposal
Industrial surveys
New plant locations
Appraising realty and personal property

#### FOR PUBLIC UTILITIES

Cooperating with you by promoting the establishment of new industries in your area. This service includes buying, selling, relocating, appraisals and surveys.

#### FOR FEDERAL, STATE, LOCAL AGENCIES,

Property acquisition Property disposal Industrial promotion Appraisals

#### FOR OUR INVESTORS

We buy complete plants including land, buildings, machinery, equipment and employee housing.



#### A PARTIAL LIST OF REFERENCES

FIRST NATIONAL BANK

Gadsden, Alabama

AMERICAN NATIONAL BANK

Gadsden, Alabama

THE CHAMBER OF COMMERCE
Gadsd

Gadsden, Alabama

MISSISSIPPI AGRICULTURAL AND INDUSTRIAL BOARD

Jackson, Mississippi

INDUSTRIAL DEPARTMENT OF MISSISSIPPI POWER AND LIGHT COMPANY

Jackson, Mississippi

INDUSTRIAL DEPARTMENT OF FLORIDA LIGHT AND POWER COMPANY

Miami, Florida

INDUSTRIAL DEPARTMENT OF
ILLINOIS CENTRAL RAILWAY

Chicago, Illinois

INDUSTRIAL DEPARTMENT OF FLORIDA EAST COAST RAILWAY

St. Augustine, Florida

INDUSTRIAL DEPARTMENT OF
ALABAMA POWER COMPANY

Birmingham, Alabama

#### OFFICERS

JOE L. MOORE, M.A.I., S. I. R., President L. Q. HEAD, B. S. in T.E., Vice-President, In Charge of Industrial Department ARTHUR C. HOWARD, JR., Secretary-Treasurer

VICE PRESIDENTS:

John A. Berkley G. M. Campbell Jack Fox Earl E. Hunt Ernest Miller Guy K. Mitchell A. B. McWilliams

For prompt service write, wire, or telephone your requirements.

CHESTNUT OF FOURTH . P. D. BOX 505 . PHONE 2531 . GADSDEN, ALABAMA

### NEW AND EXPANDING PLANTS

#### COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

#### ALABAMA

BIRMINGHAM — Alabama Metal Lath Co., let contract to J. H. West & Sons, 4210 First Ave., South, at \$47,964 for plant addition. Charles H. McCauley, Jackson Bidg., Archt. BIRMINGHAM — Alabama Fower Co. plans service building alterations.
BIRMINGHAM — Armstrong Equipment Co. plans remodeling building, 46-1 First Ave., N., \$25,000. Brooke B. Burham, 726 S. 29th St., Archt.
BIRMINGHAM — Birmingham Paper Co., Marcus McClellan, Jr., Vice-Pres., received bids for air-conditioning.
BIRMINGHAM — Birmingham Southern Railway received bid of \$26,824 from Joe Kurtts for railroad yard office building, 34th St. Yard Office. Van Keuren, Davis & Co., 3004 Sewenth Ave., S., Birmingham, Archt.
BIRMINGHAM — B. G. Brasher to construct office and warehouse building, First Ave., N., Woodlawn. Allen Bartlett, 1779 Valley Ave., Archt.
BIRMINGHAM — R. A. Brown & Co., Inc., BIRMINGHAM — R. A. Brown & Co., Inc.,

Seventh Ave., S., Birmingham, Archt.

BIRMINGHAM — B. G. Brasher to construct office and warehouse building, First Ave., N., Woodiawn. Allen Bartlett, 1779 Valley Ave., Archt.

BIRMINGHAM — R. A. Brown & Co., Inc., 2012 First Ave., North, plans office building, 8th Ave., South, bet. 21st & 22nd St., Allen Bartlett, 1779 Valley Ave., Archt.

BIRMINGHAM — Ford, Myatt & Ebaugh, 215 First Ave., N., received bid from E. E. Kellett, 825 S. 22nd St., for office building, 8th Ave., S., bet. 21st and 22nd Sts. Shaw & Renneker, 2021 Fifth Ave., N., Archts.

BIRMINGHAM — Harvey-Ragland Co., Inc., 3500 Third Ave., South, asking bids for warehouse addition. Warren, Knight & Davis, Protective Life Bidg., Archts.

BIRMINGHAM — Ingersoil Rand Co., received bids for remodeling office building and warehouse addition. Miller, Martin & Lewis, Title Guarantee Bidg., Archts.

BIRMINGHAM — Pilot Broadcasting Co., George Mattison, Pres., plan radio station WILD across Road from Vulcan, Van Keuren Davis & Co., 3004 Seventh Ave., S., Archts.

BIRMINGHAM — Southern Steam Carpet Cleaning Co., 811 Second Ave., N., received bids for plant addition, Greer, Holmquist & Chambers, Stallings Bildg., Archts.

BIRMINGHAM — U. S. Pipe & Foundry Co. (Sloss-Sheffield Div.) let contract to A. L. Suillvan, 3711 Third Ave. S., at \$319.912 for office building addition, 3330 First Ave., N. Van Keuren, Davis & Co., 3004 Seventh Ave., S., Archts.

DECATUR — Toe Worthington Corp., Harris, N. J., plans \$3,500,000 air conditioning manufacturing plant. The Austin Co., Cleveland. O. W. S. Risser, Purch. Agent, Headquarters Mfg Div., Box \$278, Pittsburgh, Pa., received bid from J. F. Holley 905 Sixth Ave., N., Birmingham, for electrode manufacturing plant, Warren, Knight & Davis, Protective Life Bidg., Birmingham, Archts.

U. S. Steel Corporation, A. J. Cox, Fairfield, to convert drill shop into bath house, Wenonah \*28 Ore Mine.

#### ARKANSAS

ARKANSAS — Arkansas Power & Light Co. requested permission to construct rural power lines in Poinsett & Craighead counties. CROSETT — The Crossett Lumber Co. granted DPA certificate of necessity for \$588,-309.

300.

MALVERN — The National Lead Co. granted DPA certificate of necessity for \$644,-356.

OSCEOLA — Osceola Finishing Co. received bids for finishing plant. Jesse M. Shelton, Atlanta, Ga., Archt.

TEXARKANA — W. S. Townsend Co., Marshall, Mich., to establish plant to produce plumbing units for trailers.

#### FLORIDA

**DADE COUNTY** — A. C. Properties plans manufacturing building.

DADE COUNTY — Central Industrial Co. let contract to Industrial Building Co., 1440

ORLANDO — C. H. Stanton, c/o Orlando Utilities Commission, received \$97,738 bid from Stachwell & Joseph Electric Co., 1316 San Marco Blvd., Jacksonville, for electrical apparatus and wiring in additions to power and filter plants, Robert & Co., Associates, 96 Poplar St., N.W., Atlanta, Ga., Archts.-Fners. 96 Poplar St., N.W., Atlanta,
Engrs.
ORLANDO — Radiation, Inc., Melbourne,
acquired new building to manufacture microwave equipment, flight instruments and allied items.
PANAMA CITY — James Gamble Rogers
II, Winter Park, Archt. for \$25,000 television

station.

PENSACOLA — James Gambie Rogers II,
Winter Park, Archt. for \$45,000 studios for
W E A R Radio and Television Station.

PRINCETON — Florida Power & Light Co.
let contract to Gaffney Construction, Inc.,
3661 S. Flagler St., Miami, for storage build-

#### GEORGIA

GEORGIA — Akers Motor Lines, John M. Akers, Vice-Pres., Gastonia, N. C., plans replacement of existing terminal in Savannah, cost \$150,000; also \$200,000 addition to Gastonia terminal garage; purchase of 100 Fruehauf Traiters at \$750,000, and acquisition of 27 tractors costing \$350,000; part of a \$2,000,000 expension program.

27 tractors cosung Sammon, part of the company of t

bid from at Circle, for \$72,989 office bullums.

Co., Assocs., Archts.

ATLANTA — Paramount Film Distribution Corp. received bids for office building.

Stevens & Wilkinson, 157 Luckie St., N.W.,

Stevens & Wilkinson, 157 Luckie St., N.W.,
Archts.

ATLANTA — Peaslee-Gaulbert Corp. received \$253,000 bid from Strother Barge Co.,
189 Cain St., N.E., for warehouse addition.
Abreu & Robeson, Archts.

ATLANTA — S. M. T. Co. received bid
from Abco Builders, 2220 College Ave., N.E.,
at \$54,072 for building. John W. Cherry Co.,
Archts.

ATLANTA — Wilby-Kincey Service Corp.
received bid from E. O. Smithfield, 489 Bishop
St., N.E., for \$101,630 office building. Stevens
& Wilkinson, Archts.

AUGUSTA — Pontiac Master Auto Service

& Wilkinson, Archts.

AUGUSTA — Pontiac Master Auto Service let contract to Guy C. Smith Construction Co., 1355 Greene St., for \$55,000 shop and office building. Lyman Hall Robertson, Archt, BOWDON — Warren Sewell Clothing Co., let contract to Presley Construction Co., Toccoa, for addition to mill building. David S. Cuttino Assocs., Atlanta, Archts.

CLARKESVILLE—Clarkesville Mill, Z. B. Lane, Jr., Plant Mgr., plans expansion of Throwing Dept.

COLUMBUS — Wells Dairies Cooperative let contract to J. P. Bradfield, Martin Bldg., for garage, truck wash and paint booth. E. Oren Smith, Archt.

EAST POINT — Ralston Purina Co. let contract to Griffin Construction Co., 26 Third St., N.E., Atlanta, for office and warehouse. Sumner Locatell & Co., Altanta, Archts.

GRANTVILLE — Grantville Mills received bids for new packing and shipping building. Robert & Co. Associates, 96 Poplar St., N.W., Atlanta, Archts.

LagRaNgE — Callaway Mills Co. let con-act to Fiske Carter Construction Co., Box 80, Greenville, S. C., for \$75,000 mill addi-on, Hillside Plant.

ROME — Georgia Power Co., Atlanta, received bids for Units 1, 2 and 3, Plant Hammond.

SCOTTDALE — Scottdale Mills received bids for addition to mail mill building. The McPherson Co. P.O. Box 2366, Greenville, S. C., Engrs.-Archts.

TOCCOA — Lullabye Furniture Corp Stevens Point, Wis., acquired factory Currahee Furniture Co.; plan remodeling.

#### KENTUCKY

LOUISVILLE — Ford Motor Co. plans \$40,000.000 assembly plant. SOMERSET — International Minerals & Chemicals Corp. Maurice H. Lockwood, Vice-Pres., Chicago, Ill., plans factory addition.

(Continued on page 14)

N.W. 21st St., Miami, at \$180,000 for warehouse, 7110 N.W. 35th Court.

BADE COUNTY — Dade Liquors, Inc., 1334 N. Miami Ave., let contract to Industrial Building Corp., 1440 N.W. 21st St., Miami, at \$29,403 for warehouse and factory, 7135 N.W. 35th Court.

DADE COUNTY — Disbrow & Morson let contract to H. D. Jacoby, 2734 S.W. 25th Lane, Miami, for \$30,000 warehouse, 3535 N.W. 50th St.

DADE COUNTY — Florida Power & Light Co., Ingraham Bidg., Miami, let contract to B. H. Weery, Ingraham Bidg., Miami, let contract to B. H. Weery, Ingraham Bidg., Miami, for \$335,000 power plant addition. Cutler Road.

DADE COUNTY — Ray Witt Picture Co. let contract to Republic Builders, 2904 Biscayne Bivd., Miami, for \$30,375 warehouse, 6895 S.W. 81st St. Maurice S. Weintraub, 235 Lincoln Road, Miami Beach, Archt.

DADE COUNTY — World Iron & Pipe Co. let contract to Industrial Building Corp., 1440 N.W. 21st St., Miami, at \$24,308 for sales and storage building, 6945 N.W. 36th Ave.

**New and Expanding Plants** Reported in April

**Total for** First Four Months of 1953 681

First Four Months of 1952

FERNANDINA BEACH—Container Corporation of America, Frank J. Sauer, Vice-Pres., Chicago, Ili., plans corrugated container plant. Morton L. Pereira, Chicago, Archt.-Engr.

HIALEAH — Robert Russell Scrap Steel Corp., 1101 N.W. 22nd St., Miami, let contract to Momar Construction Co., 1514 S.W. 3rd Ave., Miami, for warehouse and offices. Maurice S. Weintraub, 235 Lincoln Road, Miami Beach, Archt.

MIAMI — Butler-Wilson Paper Co., 1401 N.W. 22nd St. let contract to Duffey Construction Co., Inc., 1395 N.W. 21st St., at \$25,000 for warehouse addition, 1435 N.W. 22nd St.

\$25,000 for warehouse addition, 1435 N.W. 22nd St.

MIAMI — Cheely Lumber Corp., 1400 N.W. 17th Ave., let contract to Hamilton Construction Co., 7541 N.E. Third Place, for \$28,000 office building, Charles Paul Nieder, 1104 Avenue C—20th St., Airport, Archt.

MIAMI — Custombilit Furniture Co., 100 N.E. 40th St., let contract to Feldman Building Corp., 605 Lincoln Road, Miami Beach, for \$44,640 manufacturing building, 101 N.E. 39th St. A. Herbert Mathes, 605 Lincoln Road Bidg., Miami Beach, Archt.

MIAMI — Everglades Laundry, 2120 N.W. 1st Ave., let contract to H. Popkin, 1624 Albon Road, Miami Beach, for laundry addition, N.W. 1st Ave. and 21st St. Norman M. Giller, 1575 Washington Ave., Miami Beach, Caller, 1575 Washington Ave., Miami Beach, Co. Main Contract Co. 1801 Norman M. Giller, 1575 Washington Ave., Miami Beach, Co. 1801 Norman M. Crost. Southers, Trucking, Co.

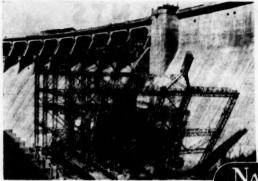
Giller, 1575 Washington Ave., Miaml Beach, Archt.

MIAMI — Great Southern Trucking Co., 64 N.E. 20th St., let contract to John A. Greenaway, 1430 N.W. 95th St., for warehouse and office, N.W. 20th St. & 17th Ave. LeRoy K. Albert, 251 Alhambra Circle, Coral Gables, Archt.

MIAMI — Jefferson Co., Inc., 2140 N.W. 23rd St., will receive bids for interior alterations to warehouse, Montgomery Atwater, 700 S. W. 12th Ave., Archt.

NORTH MIAMI — A. T. Tyree, 1240 N.E. 103rd St., Miami, let contract to Webb Construction Co., 620 N.E. 125th St., Miami, at 5150,000 for factory and offices, 14555 N.E. 20th Lane, Robert K. Frese, 8380 N.E. 2nd Ave., Miami, Archt.

ORANGE CITY — Lyle Roberts, Inc., Deland, awarded contract for \$21,950 Orange City telephone building, James Gamble Rogers II, Winter Park, Archt.



HE Nashville Bridge Company will gladly quote on struc PRE Nathwille Bridge Company with gladly quote on those two forms of the fourth and South and So west. Our skill in the tobrication and erection of intricate steel structures is well-known. We are particularly qualified to supply the Power Distributing Industries with transmission to supply the Power Distributing Industries with transmission towers and switchyard structures—hot-dip galvanized after fobbrication. Fabrication and erection of both steel and machinery for movable type bridges is a specialty. Look machinery for maxable type bridges is a specialty. Look to Nashvilla for simple steel requirements as well as intricate structural jobs

Plants and offices in Hashville, Bessemer, Alabama. We also own and operate the Bessemer Galvania

ASHVILLE BRIDGE COMPANY BESSEMER, ALA

### NEW AND EXPANDING PLANTS

(Continued from page 13)

#### LOUISIANA

LOUISIANA — Texas Co. let contract to O. L. Olsen Co. for Paradis Gasoline plant in St. Charles Parish.

BATON ROUGE — The Foster-Grant Co. Worcester, Mass., plan \$4,000,000 plastic manufacturing plant.

CHALMETTE — Kaiser Engineers, Inc., let contract to Lionel F. Favret Co., Inc., 937 Gravier St., New Orleans, for 1-story locker building at Kaiser Aluminum Plant.

MEREAUX — Ingram Products Co. plans expanding and remodeling Giterease Oil Co., 11 miles South of New Orleans, at \$4,000,000.

MINDEN — Remington Rand, Inc., signed \$22,800,000 contract with U. S. Army for operation of extension to be built at Minden Ordnance Plant.

MONROE — George F. Lastrapes, 5810 Fairfield Ave., Shreveport, plans \$140,000 four-level parking building.

NEW IBERIA — John Hayes Buick Co. plans 1-story automobile sales building, Robert La Stephan, 901 Lee Ave., Lafayette, Archt.

NEW ORLEANS — Illinois Central Rail-

Archt.

NEW ORLEANS — Illinois Central Railroad let contract to Leionel F. Favrot Co.,
937 Gravier St. New Orleans, for alterations
to warehouse No. 3 at Poydras Yards.

NEW ORLEANS — New Orleans Public
Service, Inc., plans \$29,000,000 construction
program.

Service, inc., plans program.
STERLINGTON — Commercial Solvents Corp. New York, N.Y., let contract to Luria Engineering Co., 500 Fifth Ave., New York, for one-story plant.

MARYLAND — Chesapeake & Potomac Telephone Co., Baltimore, plans \$8,180,000 expenditure throughout state.

BALTIMORE — Arundel Construction Co., Lehigh & Eager Sts., plans \$30,000 loading dock building, 1038 N, Kresson St. Cyril H. Hebrank, 20 E. Lexington St., Archt.

BALTIMORE — City Oldsmobile, Inc., 4618 Edmondson Ave., received bids for showroom and garage, Edmondson Ave. & Glen Allen Drive, Hall, Border & Donaldson, 2517 St. Paul St., Archts.

BALTIMORE — F. C. Cook Co. plans office building and warehouse. East side of Charles St. Ave. in Woodbrook.

BALTIMORE — Crown Cork & Seal Co., Inc., Eastern Ave. & Kresson St., let contract to Consolidated Engineering Co., Inc., 20 E. Franklin St., for alterations to Building No. 40, Highlandtown Plant, Luclus R. White Jr. 1009 N. Calvert St., Archt.

BALTIMORE — Eastern Box Co. let contract to Young & Adams, Inc., 2 W. 22nd St., for \$35,000 factory addition, 3801 Asiatic Ave.

for \$35,000 factory autition, 5500 Ashace. Ave.
Ave.
BALTIMORE — Gay Electric Co., 416 N.,
Greene St., received bids for office storage building, Dukeland St. near Frederick Road BALTIMORE — General Refractories, 2400 Seventh Ave., let contract to The Land-Simmons Co., 3922 Hickory Ave., for \$28,000 shed, 3401 Seventh Ave.

BALTIMORE — Holitie Manufacturing Co.,

mons Co., 39/22 Hickory Ave., for \$28,000 shed.
3401 Seventh Ave.

BALTIMORE — Holtite Manufacturing Co.,
Warner & Ostend Sts., let contract to Talles
Construction Co., 41/23 Reisterstown Road, for
\$75,000 storage building, 1301 Russell St.
BALTIMORE — Maryland Drydock Co.,
George H. French, Pres., plans \$1,000,000
capital improvement program.

BALTIMORE — Maryland Dry Dock Co.,
George H. French, Pres., plans \$1,000,000
capital improvement program.

BALTIMORE — Maryland Dry Dock Co.,
Boc \$306 South Station, plans 2 fabricating
shops, 2900 Childs St., \$193.075.

BALTIMORE — McClung-Logan Co., Key
Highway & McComas St., let contract to
Kirby & McGuire, Inc., 2518 Greenmount
Ave., for office and warehouse, Washington
Bivd. & Halethorpe Farms Road. O. E. Adams
& T. Rieg, 2513 N. Charles St., Archts.

BALTIMORE — The Ruberoid Co. received
bids for plant alterations, 1500 S. Ponca St.
The Balinger Co., Archts.

BALTIMORE — Wabash Manufacturing
Co., Inc., 4800 E. Wabash Ave., plans \$50,000
manufacturing building, 4715 E. Wabash Ave.

BALTIMORE — Western Maryland Raliroad Co., Standard Oil Bidg., received bids
for boiler plant, coal pler, Port Covington.

DUNDALK — Chesapeake & Potomac Telephone Co., 320 St. Paul St., Baltimore, let
contract at \$226,700 to John McShain, Inc.,
3 W. Franklin St., Baltimore, Archt

DUNDALK — Standard Industries, Inc.,
Monument & Haven Sts., Baltimore, received

bids for \$30,000 alterations to Signal Depot Building 3000 Dundaik Ave.

EASTON — Chesapeake & Potomac Telephone Co., W. O. Mills, Mgr., plant dial center. South Washington Street.

HAMPSTEAD—Black & Decker Manufacturing Co., Alonzo G. Decker, Pres., \$2,000,000 addition to branch plant. The Austin Co., Cleveland, O., in charge of construction.

LAUREL — Chesapeake & Potomac Telephone Co., 320 St. Paul St., Baltimore, plans central telephone office, est. cost, \$803,000. Taylor & Fisher, 1012 N. Calvert St., Baltimore, Archt.

MORNINGSIDE — Harry Hayman filed application with Communications Commission, Washington, for permission to build new standard radio station.

PIKESVILLE — Chesapeake & Potomac Telephone Co., 320 St. Paul Place, Baltimore, received bids for telephone service center. Taylor & Fisher, 1012 N. Calvert St., Baltimore, Archts.

WHEATON — Commercial Radio Equip-

more, Archts. more, Archts.

WHEATON — Commercial Radio Equipment Co. authorized by Communications Commission for new radio station.

#### MISSISSIPPI

MISSISSIPPI

BAY SPRINGS — Board of Supervisors of Jasper County received \$104.000 bid from John Low, Laurel, for addition to factory occupied by NECO Electric Products Co.

BILOXI — Southern Shell Fish Co, let contract for \$62.014 factory, E. Bay View Ave., to J. P. Starks, 1432 Robertson Ave. I. Daniel Gehr, Old Peoples Bank Bidg., Archt.

CANTON — Muskin Industries, Chicago, Ill., plan new wood products plant.

HOLLY SPRINGS — Board of Supervisors of Marshall County plan new electronics plant to be occupied by Eric Resistor Corp., Eric, Pa. John L. Turner, 201-2 Medical Bidg., Jackson, Archt.

KOSCIUSKO — Mayor and Board of Aldermen of City received bids for factory addition, occupied by Pathfinder Coach Division, Superior Coach Corp., of Lima, Ohlo, lessee. \$150,000 bond issue voted.

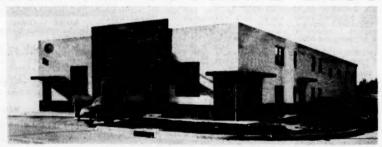
McCOMB — Mayor & Selectmen of City received bids for factory to be occupied by McCOmb Yarn Co, \$150,000 bond issue recently voted. J. H. Ryan, Summit, Archt.

(Continued on page 58)

#### TRINITY INDUSTRIAL DIISTRICT

"Under the Skyline of Dallas"

out the Trinity Industrial District consult your real es-

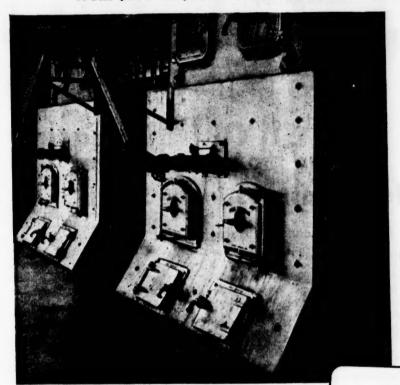


Shown at the left is the new Trinity Industrial District home of the TECNIFAX CORP.

INDUSTRIAL PROPERTIES CORPORATION, 401 Republic Bank Building, Dallas, RI-6552

## HOW A SMALL PLANT SAVES <u>BIG</u> MONEY— BY BURNING <u>COAL</u> THE MODERN WAY!

"Modernizing our coal installation cut monthly fuel bills from \$777 to \$650...labor costs from \$120 to only \$40!"





says Mr. William C. Musch, Chief Engineer, Allen Memorial Hospital, Waterloo, Iowa.

Here's Allen Memorial Hospital's new steam plant. Boilers are fired by pneumatic spreader stokers. The plant now operates with ½ the manpower formerly needed. Compared to the old installation, the new equipment saves 18¢ on every thousand pounds of steam generated. The savings realized by this small plant will pay for the entire installation in 7½ years.

• Whether you plan to modernize your steam plant, or build a new one...whether you burn a lot of fuel, or a little...you can cut a big percentage from your operating costs by using up-to-date coal equipment.

A consulting engineer can show you how you can cut labor costs to a minimum with automatic coaland ash-handling equipment...how you can get more steam for every dollar when you burn coal in a modern installation designed to meet your *specific* needs.

Of all fuels, only coal has ample reserves for the future. And to produce this coal, America has the world's most efficient coal industry. That means that coal users, unlike those committed to other fuels, get the advantages of dependable supply and relatively more stable prices—now and for the future!

#### If you operate a steam plant, you can't afford to ignore these facts!

COAL in most places is today's lowest cost fuel.

COAL resources in America are adequate for all needs—for hundreds of years to come.

COAL production in the U. S. A. is highly mechanized and by far the most efficient in the world.

COAL prices will therefore remain the most stable of all fuels.

COAL is the safest fuel to store and use.

COAL is the fuel that industry counts on more and more for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

#### BITUMINOUS COAL INSTITUTE

A Department of National Coal Association, Washington, D. C.

YOU CAN COUNT ON COAL!

#### Just off the Press!

## 1953 Blue Book of Southern Progress

ORDER YOUR COPIES NOW \$2.00 a Copy

### The Indispensable Tool for—

Manufacturers

Bankers

Educators

**Engineers** 

**Editors** 

Librarians

Sales Executives

Civic Leaders

**Statisticians** 

## —and those engaged in securing New Industries in the South

#### **Important Economic Data**

For Nearly 200 Southern Metropolitan Centers:

Detailed data for cities of 20,000 population or over will show:

Receipts from Manufacturing, Trade, Service, and Other Enterprise;
Income, both Total and Per Capita;
Consumer Purchases, both Total and Per Capita;

News of Current and Planned Expansion of Industry:

#### For All State Economic Areas:

Detailed data will show:

Receipts from Farming, Mining, Construction, Manufacturing, Utilities, Finance, Wholesale Trade, Retail Trade, Services, and Total Business Volume;

Features highly valuable for purposes of directing sales promotion campaigns, or for allocating plants for new industry.

## 1953 BLUE BOOK OF SOUTHERN PROGRESS

Please send me postage prepaid, . . . . . . copies of your new 1953 edition at your special, pre-publication price of \$2.00 a copy. My check for \$ . . . . . . . . is enclosed.

NAME .....

ADDRESS

CITY AND STATE .....

MANUFACTURERS RECORD PUBLISHING COMPANY
Bultimore 3, Maryland



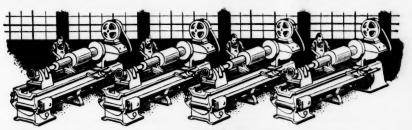
Comprehensive Data for each of the 16 Southern States shown in above map.

## Tool Steel Topics

BETHLEHEM

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. Export Distributors Bethlehem Steel Export Corporation



## Output up 150 pct with Red Sabre Bits

Four identical lathes, side by side, produced identical parts in one of our customer's shops. Using both high-speed steel and carbide tool bits, the rate per shift was set at 150 pieces per machine by the time-study engineers.

One of the lathe operators heard about our Red Sabre tool bits from a friend. So he brought one to work and began using it. He surprised himself by finishing 325 pieces in one shift, earning a nice bonus.

When he kept up his high rate, the payroll department began to ask questions. But a check-up showed that the operator's production was being reported correctly. In fact, his output increased to an average of 370 pieces.

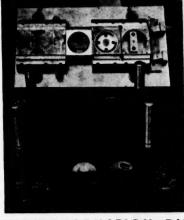
When the time-study men got to the

bottom of the mystery they really became enthusiastic. Red Sabre bits were installed on all four lathes. Output reached as high as 400 by increasing speeds and feeds.

Red Sabre bits are mighty popular in this shop because both the machine operators and the management are reaping the benefits of the increased output.

Red Sabre is our super high-speed steel. It has more wear-resistance and higher red-hardness than run-of-the-mill tool bits. Red Sabre tool bits, hardened to a minimum of Rockwell C-65 and ground accurately, are available in all standard sizes.

Like to try them in your shop? Order a couple from us at Bethlehem, Pa., or ask your distributor about a trial.



#### HIGH-PRODUCTION DIE

This blanking, drawing, and forming die is made of high-carbon, high-chromium tool steel (our Lehigh H) to make possible long production runs. Operated in a 350-ton press, it produces end caps for a refrigeration unit. Hardened to Rockwell C-60, this die turns out about 100,000 pieces from 3/16-in. steel strip before redressing is needed. An air-hardening grade of tool steel, Lehigh H provides very high wear-resistance and the least amount of distortion during heat-treatment.

## BETHLEHEM TOOL STEEL ENGINEER SAYS:



Remedy those fatigue-failures

Tools such as chisels, that are subjected to repeated stresses, often fail suddenly. As the tools are made from shock-resisting steel, these sudden failures can look mysterious. But close examination of the failed parts will often reveal that the failures were actually not sudden but occurred by progression of a crack part way through the section, followed by sudden fracture of the remaining section.

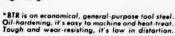
Fatigue-fractures have a characteristic, smooth-rubbed surface where the initial erack opened up, and an inner crystalline zone revealed by the final sudden break. Often the smooth-rubbed surface shows parallel "oyster-shell" markings, and may even show evidence of rusting.

Fatigue-failures usually begin at a stress-concentration point. This may be a notch, a poor fillet, tool mark, accidental nick, or a stamping. Correcting such design or mechanical faults is the cure.



(Left) A kitchen-ware maker uses BTR\* for the die that blanks and draws .032-in. aluminum to accurate size. The fit between the die halves is held to close tolerance to assure proper flow of metal during the one-stroke draw and to produce a smooth surface. This die has produced more than half a million pieces.

(Right) In a single operation these piercing dies, made of our BTR\* tool steel, put 125 holes in the aluminum accessory for pressure cookers shown at the right. The punches were in excellent alignment after heat-treatment, and showed little evidence of wear after producing 165,000 pieces without requiring regrinding.





### LITTLE GRAINS OF SAND.

"Little drops of water, little grains of sand, Make the mighty ocean, and the pleasant land."

More Power to 'em. Ex-president Herbert Hoover's recent speech proposing that the U.S. government get out of the electric power business, focuses attention on the job private utilities are doing to supply electric power for the development of atomic energy, an area that once was largely in the hands of public power. Many of the newer AEC projects will be supplied with power generated primarily by privately owned and managed electric companies. For example, a South Carolina utility is building a 150,000-kilowatt plant on the Savannah River to furnish power to the hydrogen bomb facilities now under construction there. Similarly, in the Ohio Valley 13 electric utilities are proceeding with a giant 2.2 million-kilowatt installation, the current from which will serve a U-235 diffusion plant in southern Ohio. This is one more sign of the changing climate for business,

Grants-in-Aid. One of the primary means by which

power has been centralized in Washington over the past quarter of a century is through the grant-in-aid device. Grants-in-aid have grown and spread over the United States like an evil cloud in the past 20 years. In 1932 there were 19 Federal programs of aid to the States and they cost \$250 million. In 1952, there were 48 such programs and their cost to the Federal Government alone approached \$3 billion. All of them have flourished, in part, because they

fostered the illusion that the people were getting something for nothing. It is hard to imagine a more pernicious falsehood. The simple truth of the matter is that government cannot give anyone something for nothing. Government can only give you what it has first taken from you, and it keeps its brokerage fee in the process. This expansion of an insidious program was motivated by collectivists who wanted to get and keep the greatest amount of power possible in Washington, where it was beyond the effective reach and control of the people. They wanted the people to look to Washington, rather than to their own communities, and to their own States for government benefits and services.

It Just Can't Work. There is again talk of abolishing the R.F.C. and setting up some new agency which would only lend to little businesses under a different set of rules. The demise of the R.F.C. is long overdue, but swapping one agency for another will not end the trouble. For the real difficulty is not with any one agency or with any one set of officials. There is an inherent problem whenever anyone takes on the handling of other people's money. With the private banker this problem is met by the fact that not only the head of the institution but the instituion itself is being daily tested. And the test is not limited to honesty. It is continually probing judgment, prudence and purpose. The responsibility tested is all-encompassing. But with public funds there can never be a like responsibility. An official of integrity will be responsible to his own conscience, and with such officials there will be no

> fraud. But the standards of purpose to which he is responsible are only his own.

> The trouble with the R.F.C. is not its name or even the peculiar behavior of its managers. Its real trouble is that is has the use of, but no responsibility for the money it lends.

Economy with Defense. Any defense program costs money, but it is dangerous to get in the frame of mind where you think that a \$60 billion

defense program is automatically better than a \$50 billion defense program or, conversely, that a reduction on defense spending is automatically a reduction in defense strength. There are a lot of people already in this frame of mind. Let someone suggest, say, a \$4 billion cut in the defense budget and immediately there will be a hue and cry that he is wrecking the defense program. Yet the real issue is not how many dollars are cut off but whether what those dollars would have been spent for was of sufficient value and how it is proposed to spend the remaining dollars.

(Continued on page 20)

The belief that war and government waste create prosperity is so manifestly absurd that it seems strange that any intelligent person could harbor such a delusion.



Whatever your need for barges.. American Bridge has complete all-weather facilities for the construction of all-welded steel barges—and other steel floating equipment for rivers and harbors.

## of Every Type

- **BARGES** 
  - CAR FLOATS
  - **PONTOONS**
  - DERRICK HULLS
  - DREDGE AND
    TOWBOAT HULLS
  - STEEL DRY
    DOCKS
  - GATES
  - LOCKS

Ways at

AMBRIDGE, PA. and TRENTON, N. J.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION • GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

Contracting Offices in: AMBRIDGE • ATLANTA • BALTIMORE • BIRMINGHAM • BOSTON • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DENVER • DETROIT • DULUTH • ELMIRA

GARY • MEMPHIS • MINNEAPOLIS • NEW YORK • PHILADELPHIA • PITTSBURGH • PORTLAND, ORE. • ROANOKE • ST. LOUIS • SAN FRANCISCO • TRENTON

UNITED STATES STEEL EXPORT COMPANY, NEW YORK



AMERICAN BRIDGE

## Pioneers in Pension Planning for Corporations

## PRELIMINARY SURVEYS IMPARTIAL REPORTS

Profit-sharing or combination plans. Self-administered, bank trusteed or insured. Independent actuarial services. Over 20 years specialized experience. Write for information.

#### R. P. BURROUGHS CO., INC.

CHATTANOOGA 2, TENN.
Chattanooga Bank Bldg.

BALTIMORE 18, MD. 12 W. 25th St. NEW YORK 4, N. Y.

MANCHESTER, N. H. 1015 Elm St.

## FREE CATALOG!

available to you who are interested in the facts on open steel flooring.



Up to the minute information on the hows and whys of construction and installation of Tri-Lok Open Steel Flooring may now be at your finger-tips. Here is a four-page catalog designed to aid you in selecting the best types and styles of opensteel flooring for your particular construction project.

IN THIS CATALOG YOU'LL FIND Tables of Safe Loads
Specifications required for open steel flooring installation
Types of Tri-Lok Open Steel Flooring

available
Information concerning construction, sizes,

strength and adaptability of Tri-Lok Open Steel Flooring

FOR YOUR COPY, WRITE FOR BULLETIN PW 11



DRAVO

al Distributor for THE TRI-LOK CO.

Drave Building, Fifth and Liberty Avenues, Pittsburgh 22, Pa.

#### LITTLE GRAINS OF SAND

(Continued from page 18)

Changed Fiscal Policy. The present Administration has abandoned the twenty-year-old-Roosevelt-Truman practice of manipulating the capital market in favor of the government as a chronic borrower. Not too abruptly, but step by step the government is to be moved into the same position as any borrower, with due regard of course to its credit position based on its power to tax. This new Treasury policy may be expected gradually to move ownership of government obligations out of the banking system into private hands. It was the financing of the war largely through resort to the banks that created a volume of deposits and circulating money out of proportion to the then current supply of goods; it was this condition that practically defeated the war-time price controls and engendered the post-war price rise. A reversal of the process will have a price-deflationary influence.

Worse than Anticipated. A bigger budget deficit for the current fiscal year than Washington expected seems inevitable. Some Treasury officials now are openly conceding this fact. The final Truman estimate of the deficit for fiscal 1953 was \$5.9 billion. None of Eisenhower's teammates, preoccupied as they were with fiscal 1954, thought of questioning this figure. Now, however, with the March tax collections over, it is evident that the estimate was to low, perhaps by as much as \$2 billion. The biggest flop as a revenue producer has been the excess profits tax. When it was first passed, tax experts forecast that it would yield \$3.5 billion annually. This was subsequently revised downward to \$2.5 billion. Recently a highly placed Washington official admitted privately that he expected EPT this fiscal year to bring in less than \$1 billion.

Real Aid to Small Business. To help small firms which need equity capital, the Securities and Exchange Commission is dispensing with some of the more annoying red tape surrounding the registration of new stock issues. It recently simplified forms and procedures involved in registering issues of less than \$300,000. Last month it did the same thing for firms that have employees' stock purchase plans. Several hundred companies have such plans. Because the device builds employee loyalty and company morale, it is growing rapidly. The move by the SEC is in line with the growing trend among Washington agencies toward showing greater sympathy with the legitimate objectives of business.

Tax Exemption for Health. Congressman Bolton of Ohio has introduced into the Congress a bill to allow deductions from income taxes of all medical and dental expenses, as well as costs of membership in voluntary medical insurance and hospitalization plans. As the law is written now, only those over sixty-five may deduct all medical expenses. Below that age those who face heavy health costs may deduct only those medical bills in excess of five per cent of their gross incomes.

(Continued on page 22)

## "Get cleaner threads, tighter joints





#### FIREPROOF MAINTENANCE-FREE

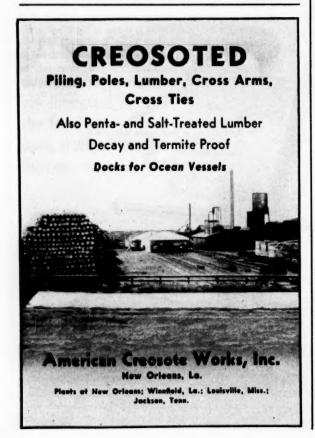
Ruberoid Stonewall asbestos-cement Board is ideal for interior or exterior construction...cuts building costs... saves maintenance expense. It is fireproof, water-resistant, rot-proof, rat-proof, rust-proof... never needs paint. It is strong and rigid, yet bendable and easy-to-work. Can be

sawed or scored and broken to size. Takes nails readily.

Use Stonewall Board for ducts, partitions, shower stalls, fire barriers, bins, exterior sheathing, arched roofs, etc. Write today for literature, cost and where to buy it. The Ruberoid Co., 500 Fif.h Ave., New York 36, N. Y.

### The RUBEROID Co.

ASPHALT AND ASBESTOS BUILDING MATERIALS



#### LITTLE GRAINS OF SAND

(Continued from page 20)

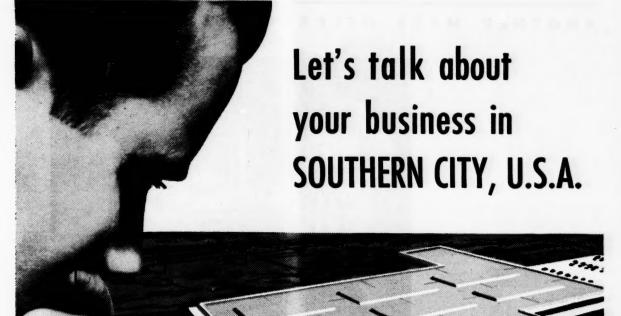
Mr. Bolton's bill is a part answer to the false lures of socialized medicine, and it doesn't put the government in the business of handing out false teeth or laxatives and paring corns. It places before the taxpayer an inducement to see the doctor and the dentist, by allowing a deduction from his income.

Abuse of Civil Service. The story of what has been done in the name of Civil Service during the last two decades reflects cynical abuse of what should be a system beyond the influence of political considerations. Some twenty years ago, the federal payroll contained less than 500,000 people. Since that time, this figure has expanded to 2,500,000. It is a fact, of course, that there are many faithful workers in the ranks of Civil Service. But during recent years, a great many employees, who did not come into Civil Service under competitive examinations, were covered under Executive order.

People who were brought in during the Truman Administration as temporary employees have been given permanent status since that time. In other words, they started out as political appointees; now they enjoy full protection of Civil Service regulations without ever having taken the competitive examinations which formed the back-bone of the system. Many of these jobs involve the authority to make decisions involving policy. If the Eisenhower Administration is to do the job the nation has indicated it wants done, a way must be found to resolve this dilemma. Men in top positions of responsibility must be given the chance to hire subordinates they can depend upon to carry out important assignments.

Real Optimism. More indicative of business optimism than the rosy pictures which government office-holders paint are the capital investment plans of big and little corporations. Many of these were outlined at stockholders' annual meetings last month. For the most part they involve long-term programs that look beyond the probable fluctuations in current consumer demand. For this reason they are bound to be a sustaining force in respect to total employment, materials requirements and high-level personal incomes. Prominent in these long-range expansions are the chemical, oil refining, motor, rubber, electrical equipment, household appliance, and gas and electric service industries which compose a large part of the country's manufacturing and service activities.

Monopoly Power. The problem of strikes that affect national health and safety arises largely from the abuse of monopoly powers held by certain unions. The law should treat unions and employers alike in prohibiting conspiracies in constraint of trade and other monopolistic abuses which run afoul of the public interest. So long as unions are free under the law to engage in monopolistic abuses, the national health and safety will be in jeopardy from industry-wide strikes and other practices dangerous to our society. The situation can best be corrected through amendment of the anti-trust laws.



Certainly Southern City, U.S.A., offers industry many advantages—expanding markets, capable employees, ample electric power at reasonable rates, excellent living conditions and a mild climate, to name only a few.

But do you know how your business or industry best fits into this pattern of progress?

Let's discuss the possibilities in this area from your viewpoint. Experience gained in serving thousands of businesses and industrial plants, qualifies us to talk about your business not in generalities but in specific terms.

#### SOUTHERN CITY, U.S.A.



This is Southern City, U.S.A. our way of expressing as a unit the vast Southeast area served by the four associated electric power companies in The Southern Company System.

The area served by the following companies:

ALABAMA POWER COMPANY, Birmingham, Alabama

GEORGIA POWER COMPANY, Atlanta, Georgia

GULF POWER COMPANY, Pensacola, Florida

MISSISSIPPI POWER COMPANY, Gulfport, Mississippi

THE SOUTHERN COMPANY,
Birmingham • Atlanta

Address your inquiry to the Industrial Development Department of any one of the power companies listed above.

#### ANOTHER MARK OF PROGRESS IN ALABAMA



#### Among Many Research Projects at SRI Are These

- ... developing methods for conservation of strategic materials;
- ... improving the whiteness of papercoating clays;
- ...improving the wearing qualities and appearance of fabrics for clothing:
- ... converting waste materials, such as sawdust and wood chips, into valuable chemicals:
- ... evaluating new materials of construction such as concrete blocks, lightweight plaster, and insulating boards for low heat losses:
- ...studying means for storing and utilizing energy from the sun through the photosynthetic process;
- ... designing and evaluating heat pump installations for year-round air conditioning of homes throughout the southeast:
- ... developing scientific instruments for use in control of manufacturing processes;
- ...improving the dyeing of textiles;
- ... assisting a number of branches of the Department of Defense in research for national security;
- ... making radioactive compounds for sale to other laboratories.

## The New Alchemy...

### at Southern Research Institute

In olden days alchemists dreamed and toiled for years on end in the fruitless effort to convert base metals—like iron—into gold. Today in the modern laboratories of the Southern Research Institute skilled metallurgical research workers are creating wealth more precious than gold by converting various metals and alloys into more useful materials by improving their durability, machinability and grades.

How do they do it? It would take a lengthy treatise to describe all the complex processes—microscopic examination of metal structures... melting, mixing and moulding many alloys in a small-scale furnace... test after test under varying conditions... and rolling of the ingots into wire or rods or sheets or bars... then more tests of the finished product.

Many small foundries come to this division of the Institute to find how to improve their castings . . . many large ones employ research to improve their output.

Results of the services of S.R.I.'s 82 scientists are reflected in the Institute's amazing seven-year growth from a small beginning in a converted carriage house to a nationally recognized non-profit organization that is opening new doors for industry's progress.

## Alabama Power Company

Helping Develop Alabama



"What Enriches the South Enriches the Nation"

## Research

Business men in the South recognize the fact that research is the fountain of youth for every dynamic industry. They know that research is not only desirable for economic progress, but that it is essential for survival in our competitive business world.

During the past quarter of a century, the number of firms in the nation engaged in industrial research has multiplied eightfold, while expenditures for this purpose have increased fifteenfold. Total annual expenditures for research of all kinds, including industry, colleges, foundations, and the Government, are in the neighborhood of \$3.5 billion, a tenfold increase since 1940. While this seems like a large sum, it constitutes less than one per cent of our gross national product. Of the total amount spent for research, 57 per cent is accounted for by the Government, 38 per cent by industry, and the remaining 5 per cent by colleges and other nonprofit organizations.

Research is not only the rejuvenator of industry, it is also the incubator in which new industries are born and from which are emerging a constantly increasing list of new and improved products and production methods so numerous and varied as to defy attempt at even classification. As Crawford H. Greenewalt, President of E. I. duPont de Nemours & Company, has said: "Back of our plants, back of the people who build and operate them, are our research laboratories, and they are perhaps our greatest single resource. Every new product, every improvement in process, every advance in technology, had its beginning somewhere, somehow, in the mind of a research worker in his laboratory. Research is the essential vitamin without which the body of industry loses its vitality and dynamic character."

There is considerable concern in both business and scientific circles over the dominating influence that the Federal Government exerts in the field of research, in spite of the fact that most of the money spent by the Government on research is for the war machine. They fear that secrecy, red tape and political considerations will have an unfavorable effect upon scientific investigations. Eminent scientists have testified that much more satisfactory results would be obtained if the money spent by the Government for traditional research were handled by private interests. The most effective means of promoting research would be to revise tax laws so that those in the upper income brackets may be induced to give more liberally to the scientific work of colleges and universities, and so that business firms can set aside larger sums of money for research work.

Thoughtful men also agree that more money should be spent on fundamental research which is the seed corn of all practical research and scientific development. While industrial firms often find it necessary to do some fundamental research, most of their scientific work is concerned with applying research to practical problems.

Colleges and Universities should serve as the sources and promoters of fundamental or "pure" research. They should foster scientific personnel in a congenial atmosphere so that the initiative, imagination and resourcefulness of gifted individuals may enjoy untrammeled freedom.

The best evidence of the profitableness of effective research is to be found in the record of American business enterprise. This shows that industries which have applied scientific methods and have adopted modern facilities without exception make the greatest progress, pay top wages, and are in the best position to meet changing conditions.

## Readjustment in securities markets erases post election day advance

But long term plans of the Kremlin may preclude relief from tension and the burdens of rearmament.

By Robert S. Byfield Financial Editor

HE March-April decline in the stock market has at this writing erased the entire post-election day advance. It will be recalled that in November and December the election results were considered a victory for the principles of free enterprise and that a surge of investment confidence would produce a stimulating effect on quotations for common stock equities. During the Winter the succession of cabinet and other appointments announced by the new administration was heartening, since the appointees were almost without exception men and women who had won distinction in their respective fields of endeavor. Investors reflected at that time that they might look forward to some modification of the harsh anti-trust policy which had been in vogue for many years. It was further expected that the Department of the Interior would revise its attitude, at least in part, towards the expansion of public power, the construction of further Federal power installations and reduce competition with private business in this field.

There were other reasons for predicting an era of good feeling among investors. It would not be an over-statement to say that these expectations have begun to be realized in large measure, although the administration is faced with great problems both at home and abroad. We are witnessing a major attempt to cut, government expenses, and while there is some doubt as to whether the excess profits tax will expire on June 30th according to statute and not be extended, the desire to reduce taxes without incurring budgetary deficits is manifest.

Furthermore, the Federal Reserve Bank under Regulation T has reduced security margins from 75% to 50%. On the other hand, the January 15th action of the Federal Reserve System while an entirely sound move, fiscally speaking, raised the rediscount rate from 1%% to 2%. The 2% rate is not high, but the move was readily interpreted as a signal or warning that inflationary forces acting upon our economy would definitely be brought to heel. We were put on notice that the stewardship of the new administration would be along more orthodox lines. Traditionally, a rise in the basic money rate brings lower bond prices all along the line, and this is usually followed after a period by a halt in rising stock prices or an actual decline.

If Federal Reserve policy has been the motivating force which produced the decline in stocks, it is thoroughly understandable. A sequence of this character may be identified qualitatively but it is not possible to measure it quantitatively. If, however, we are witnessing what has in the past been known in the vernacular as a "peace scare" then the price performance of common stocks may constitute, at least in part, a false move with a reversal a distinct possibility.

In late April there was no evidence other than some gestures on the part of Peiping and Moscow that anything like "peace" was in the offing. The exchange of wounded and sick prisoners has not lessened the bitterness and tensions which the whole Korean affair has engendered. Even if we are to have an armistice or truce, it would have little effect upon our rearmament effort. The almost universal suspicion which the actions of the Iron Curtain countries has now brought about in the minds of the American people will not readily disappear. Little by little the facts are being brought home to the public that a genuine peace which would usher in an era of good will with true cooperation between East and West would require a great deal more than a mere cease fire in

For over thirty years there has been no secret as to the objectives and program of the Soviets, They are set forth in scores of books and pamphlets in almost all of the leading languages in the world. Their authors are the recognized spokesmen for international Communism, including Lenin, Stalin and Malenkov and their American counterparts such as Foster, Browder and many others. The details of the world revolution looking towards the dictatorship of the proletariat in all countries have been spelled out in the minutest detail. One has only to mention a few of the documents which comprise one of the unimpeachable sources. We refer to the Theses and Statutes of the Communist International adopted by the Second World Congress in 1920; the Constitution and Rules of the Communist International and its program adopted by the Sixth World Congress in 1928, and the reports of Joseph Stalin to the 16th, 17th and 18th Congresses of the Communist Party of the Soviet Union. All of these documents are

available in English, but, unfortunately, few Americans and even fewer investors have taken the time and effort to glance at them. The blueprint for World conquest consists of long term, medium term and short term plans piled on top of one another like the layers of a cake and their very nature shows that they are not easily reversible. If International Communism renounced its plans for world conquest it would no longer be Communism, because the aggressiveness and the global program of the Communist parties are integral and inseparable parts of their ideology. Hence, the ending of an actual shooting war in Korea would constitute only a minor incident and far from a decisive one in what is generally admitted now to constitute the greatest bid for power in the history of the modern world.

It is evident that the changes in domestic fiscal policy and the end of practices which have contributed to inflation in the United States have caused a decline in the prices of a good many raw materials traded in the international markets, such as rubber, tin, lead, zinc, copper, certain fibres and various food products. It is not possible to dissociate this movement from the preceding rise which took place after the outbreak of the hostilities in Korea. That rise and the present elimination thereof have caused far reaching readjustments. We are definitely in such a period at this time and it is natural that occurrences of this character should have diverse effects on security prices. This has happened in the past but just now there is more than the usual confusion as to cause and effect; for example, the change in administrations in the United States, the death of Stalin and the peace feelers of the Chinese Reds.

In view of all of the above, and the events that have occurred since early November 1952, it might be unwise to conclude that the American investor is facing a difficult period just ahead. It is to be admitted that profits in some of the extractive and raw material industries will shrink below what they have been in recent years. There may be reduced traffic on some of the railroads. On the other hand, the electric utilities and the telephone companies have been struggling for years against difficulties caused by steadily rising costs. There may now be surcease from the hardships they have faced and in this respect they are to be compared with companies in the food processing and food distributing industries. The brewers may also be emerging from a long cycle of meagre profits which have plagued them because of their attempts to hold down the retail price of their products. The natural gas industry in its various phases of production, transportation and distribution should have no cause to fear a decline in the demand for its services.

We conclude that the initial readjustment in the securities markets has been haps been more violent than has been justified by a long term appraisal of the facts regarding our domestic economy and the international plans of the Kremlin.

## Inventories Increase Faster Than Sales

By Caldwell R. Walker Editor, Business Trends

WITH just about every element of the current economic situation at an alltime high, certain of these elements are beginning to attract increasing attention.

Among such elements is the one known as Inventories.

While inventories, in their abstract sense, are clear enough, their economic

significance is not always so clear.

As a primary feature, inventories are recognized as a necessary element in economic procedure.

There are some items for which stocks are not kept on hand since it is more feasible to await orders for them before proceeding with fabrication.

Such items are almost universally found in the realm of capital goods and embrace such things as special machinery and transportation equipment. They are usually made according to plan or blueprint, and stocks on hand would run risk of becoming complete loss through obsolescence.

On the other hand, stocks of goods facilitate trade for most commodities and in many instances are an actual essential to the processes of trade.

If the baby, for instance, had to wait for the manufacture of milk after registering an order, the effect on population growth might be far-reaching indeed.

The question now uppermost with respect to inventories has to do with this latter type of stocks.

Such stocks include practically all consumer essentials, most consumer luxuries, and a goodly portion of raw materials and semifinished goods that go into the foregoing.

There are several reasons why such stocks might increase. And right now they are increasing at a fairly rapid rate.

In the past 26 months, inventories of all types have risen 21 per cent, somewhat short of one per cent per month.

In the same period business sales of all types have increased somewhat under 10 per cent.

The question immediately arises: Were inventories lower than they should have been with respect to sales 26 months ago, or are they higher than they should be today?

There is no sound reason to assume that either conclusion is correct since no recognized standards have been developed for measuring the effect of light or heavy inventories on the general economy. And it is quite likely that a wide range is not only feasible but also desirable under variable circumstances.

But there is another angle that is worth considering in this connection.

This other angle involves consumer credit.

Fundamentally, consumer credit is just another kind of inventory build up. The only difference is that storage is facilitated on buyer rather than seller premises. Until paid for the goods in question are just as much a matter of seller inventory as are the goods held in his own warehouses.

So, in considering statistically, the current status of inventories, it is important that they be measured in their overall ramifications.

Taking the same period as before, consumer credit of all types increased 17 per cent during the 26 months.

When it is remembered that a goodly portion of manufacturers' inventories consist of goods held for the National Government on Defense Account, it is easy to conclude that more relative increase of inventories of a questionable nature has been brought about through the medium of consumer credit than through actual increase of seller storage.

In watching the future trend of this highly important element, it will be well to consider it in this broad light, otherwise full effect of future changes may

not be made fully apparent.

Now, as to present effect: it could hardly be said that any adverse effects have yet been felt or are likely to be felt in the very near future. If such were in the offing, it is highly likely that greater fluctuations than have yet occurred would already have appeared in the price structure.

As it is, prices have changed but little during the period under consideration, and practically none at all during the latter half of the period.

In other words, in advance of any highly adverse effects that may follow in the wake of inventory and credit build up, there are likely to be definite storm warnings on the price front, with wide breaks in commodity prices—wider than any that have thus far occurred, and consequently wide breaks also in industrial stocks—wider also than any that have occurred thus far.

And in this connection it is appropriate to remind ourselves that inventories become built up for a number of reasons, all of which may be healthy under certain conditions, unhealthy under others.

First, as sales increase, increased stocks of goods may be built up to facilitate service.

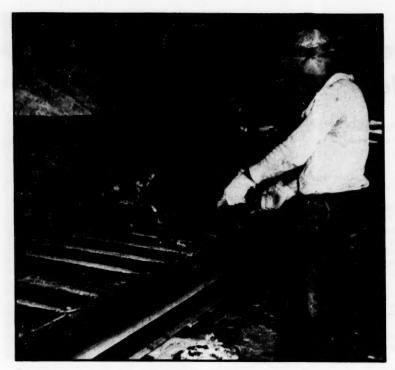
Second, as prices advance, stocks may be built up to take advantage of speculative gain.

Third, as price resistance increases on the part of buyers, stocks may back up in the hands of distributors and producers.

In watching future trends it will be well to analyze carefully any changes that occur and determine the causes for their occurrence. Such causes may contain the vital bearing that will make possible appraisal of ultimate effect.



"For the last time, Tilson, keep your feet off my lap!"



Pouring aluminum pigs at Reynolds Metals Company's Jones Mills, Ark., reduction plant.

## Aluminum leads, promotes diversity In Arkansas' Industrial Growth

WHEN John C. Branner, Arkansas state geologist, found a deposit of bauxite just outside Little Rock on the Pine Bluff highway in June of 1887, it is unlikely that he foresaw the day when the mining of that bauxite and its conversion into metallic aluminum would have become an important element in his state's economy.

But as of 1953, the aluminum industry has grown to giant proportions in Arkansas, entailing the investment of more than a quarter billion dollars in mining and manufacturing facilities and in new electrical generating capacity. Moreover, the aluminum production expansion is bringing to Arkansas an increasing number of plants using or fabricating the magic metal. Virtually all this development has occurred since the start of World War II.

Big boys of the industry in Arkansas are Reynolds Metals Co. and Aluminum Company of America, which each have three plants in the state, two of the six being still in the construction stage.

Alcoa Mining Company started mining operations in Arkansas in 1899, twelve

years after Branner's discovery, and in 1901 built a bauxite crushing and drying plant. Some 20 years later, Alcoa found that Arkansas' known reserves of highgrade bauxite were dwindling and it set to work to find an economic use for the state's extensive deposits of lowergrade ore. Out of the millions spent in research on this project came the "combination process" by which low-grade ore is subjected to a double refining method, one by the high-grade or Bayer process and then by the lime-soda-sinter process. Perfection of the combination method had the effect of greatly increasing Arkansas' useable reserves of bauxite.

It is estimated that Arkansas' known reserves are now sufficient to last for more than 40 years at the present rate of consumption—slightly over 2 million tons annually—and it is probable that future exploration will turn up additional deposits.

During World War II when the pressure for increased aluminum production became intense, Alcoa built and operated for Defense Plant Corporation two large plants—the biggest alumina works in the

world at Hurricane Creek, about 15 miles south of Little Rock, and a reduction mill at Jones Mill near Malvern. These two installations represented an outlay by DPC in excess of \$90 million.

After the war ended, the federal government sold these two plants to Reynolds Metals Company, which had made its first investment in Arkansas in 1940 with incorporation of Reynolds Mining Co., a subsidiary. Alcoa turned over to the government, also, its patents on the combination process which were then in use at Hurricane Creek. This plant, the world's largest, has a production capacity of 1,460 million pounds of alumina per year. It takes four tons of bauxite from Reynolds' nearby mines to produce two tons of alumina and two tons of alumina, in turn, produce one ton of aluminum pig.

the most efficient producers in the world. Facilities of the Hurricane Creek plant have been expanded to adapt it to use of Jamaican bauxite which, used as a supplement to Arkansas ores, will prolong the economic life of the Arkansas plants for many years.

Because of their proximity to the bauxite mines and large supplies of natural gas, the two plants at Hurricane Creek and Jones Mill have been considered among

The Jones Mill plant was enlarged substantially by Reynolds, following its purchase in 1949, by installation of a fifth potline. Its capacity was increased thereby to a total of 194 million pounds of virgin aluminum pig per year.

In 1952, Reynolds began construction of its second Arkansas reduction plant, just south of Arkadelphia, which will cost in excess of \$30 million and will have a capacity of 110 million pounds of aluminum pig per year.

Meantime, Alcoa had started work in 1951 on a new \$54 million alumina works near its old bauxite crushing and drying plant at Bauxite, in the same vicinity as Hurricane Creek. On October 14, 1952, the plant went into continuous operation and within a few months, when its sinter plant is completed, the works will be in full production with an annual capacity of 800 million pounds of alumina.

Alcoa also has started preliminary work on a new \$5,000,000 plant to be built alongside the alumina works, for production of alumina chemicals. The facility is managed by Carl R. Stout, a veteran of Hurricane Creek operations during World War II. Products to be made in the new chemicals plant will be finished end items for direct sale to consumers.

Alcoa Mining Co. continues its operations and is also supplying from a new \$2,000,000 plant near Batesville more than 1,000 tons of limestone each day to the refining works.

The impact of these operations on Arkansas' economy is substantial. When Alcoa's present construction is completed, it will have all told about 1,300 employes in Arkansas with an annual payroll in excess of \$5,000,000. Reynolds at this time has 2,600 employes in Arkansas, with a yearly payroll of about \$9,000,000 and the bringing of its new Robert P. Patterson plant at Arkadelphia into production will add 400 to 500 additional workers.

Still another sizeable operation tied in with the aluminum industry is a new plant which General Motors Corporation is building adjacent to Jones Mill. It will produce aluminum castings by a new process and will create approximately 1,000 new jobs.

Meantime, power demands of Arkansas' expanding aluminum industry provided a major impetus to enlargement of Arkansas Power & Light Company's generating capacity. This unit of Middle South Utilities Co., has either installed or has under construction since the end of World War II in 1945 a total of 685,000 KW of additional capacity, involving the expenditure, including those on transmission lines, of more than \$100 million.

A. P. & L. is increasing its Lynch plant in North Little Rock to 235,000 KW, its Stamps plant to 135,000 and its Lake Catherine plant to 205,000. In addition, it has built its new Hamilton Moses plant of 140,000 KW near Forrest City. It also has secured additional hydro peaking power. Arkansas' industrial growth generally necessitated addition of much of this power, but the aluminum industry gave it a powerful boost. Reynolds produces a substantial amount of power for its Jones Mill plant with one of the world's largest diesel installations. Each potline requires about 30,000 KW for operation—enough to supply a good-sized city.

Among other companies using bauxite which have built plants in Arkansas in recent years are American Cyanamid Corp., Porocel Corporation, Dulin Bauxite Co., and Consolidated Chemical Industries Inc.

Aluminum using industries which have placed plants in operation in Arkansas

since the end of the war include Glenvale Products D vision, Utilex Corporation, Malvern; Redmond Manufacturing Co., Jacksonville; Miller Meters Corp., Harrison; Victor Metal Products Co., Newport; Southern Extrusions Inc., Magnolia; All-States Trailer Co., Jacksonville; Palace Trailer Co., Newport; Pekin Wood Products Co., Helena; Yoder Manufacturing Co., Little Rock; Ward Bros. Manufacturing Co., Monticello; Whitehall Aluminum Foundry, Pine Bluff; Woodlin Metal Products Co. and W. S. Townsend Co., Texarkana; Southwest Manufacturing Co., Little Rock, and others. In all, Arkansas now has some 35 manufacturing plants fabricating aluminum.

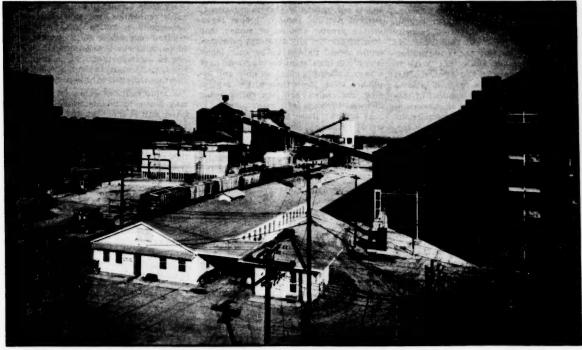
All this in a state that produced only raw bauxite prior to World War II. Approximately 97 per cent of domestic bauxite produced in the United States is mined in Arkansas, which supplies approximately a third of our requirements. The balance comes from Jamaica and South America. Most Arkansas bauxite goes into the production of metal; its use in chemicals and abrasives shows relatively little increase.

Value of Arkansas bauxite in 1952 was in excess of \$11 million. It ranks next to oil and gas as the state's most important mineral, running just slightly ahead of coal. In Arkansas it is associated with masses of nepheline syenite and occurs only in Pulaski (Little Rock) and Saline counties.

In the light of increasingly efficient methods of refining the ore, outlook for long-range operation of the Arkansas plants is considered good. And Arkansas is attracting an increasing number of fabricating plants.



At Reynolds Metals Co.'s Hurricane Creek, Ark., alumina plant, a workman is breaking up large chunks of bauxite from nearby mines. Arkansas is the nation's leading producer of bauxite.



View of Southwest entrance to Bauxite Alumina Works of the Aluminum Company of America in Arkansas,

# Peace feelers stimulate competition, spotlight planning and cost cutting

By Sidney Fish Industrial Analyst

HE peace feelers put out by the Communists during the last months has stimulated managements of manufacturing companies to give redoubled attention to long-range and "postwar" planning. They are giving greater attention to new products, new processes, as well as to cost-cutting.

Thus far, the talk of peace has not resulted in anything like a full-fledged "peace scare." The stock market was subjected to considerable speculative selling. But the public has shown, as yet, no tendency to pull in its horns and curtail buying of goods in the fear of lay-offs or lower spending by the Government.

Nevertheless, cautious executives are reviewing their long range plans, on the theory that if the peace feelers are genuine, then it is likely that competition in business will grow somewhat keener as the year progresses.

Increased competition in business can come from a variety of causes, some of which are related only indirectly to easing world tension. First, the production capacity of industry has been rising steadily, in response to defense needs, as well as high rate of consumer buying. Sooner or later, the increased capacity for production of steel, aluminum and other metals, and in capacity for producing appliances and autos, was bound to come in balance with the demand. That point has already been reached in some products, and in the second half of this year, a decline of seasonal or perhaps of even more than seasonal proportions could occur, unless new inflationary factors present themselves.

Second, the Government has been trying in every way possible to effect economies, without weakening the defense effort. This means that the Government
will try to give greater emphasis to the
most efficient defense plants at the expense of secondary plants. Where adequate stocks of tanks or other materiel
are built up, stretchouts in deliveries may
be ordered.

For example, C. E. Wilson, Secretary of Defense has been studying a suggestion that the defense base of actual production be narrowed, so that output be concentrated in the most efficient and most necessary plants. "Most necessary" plants would include those active in vital research and development work. This plan would be put into effect only where several plants are each making the same kind of aircraft engine, or the same kind

of truck. In that case, the orders of the most important or the most efficient producer would be increased, while the other plants would be cut back or placed on a standby basis. Such a program, if carried out on a wide front, could mean sharp reductions in defense work in some cities and states, while in others, the defense program would actually be stepped up. However, since a gain in efficiency would result from the cutbacks of the high cost producers, the number of dollars and man hours required for each unit produced would be cut down.

A third factor which could lead to increased competition would be a change in the public's willingness to buy. In recent months, the American consumer has been on a buying splurge. This has meant greater than seasonal gains in purchases of autos and some other consumer items. This eagerness to buy could gradually recede, just as it did in 1951. Consumer buying has been stimulated by instalment buying and other forms of borrowing, owing to the ending of Government credit restrictions. While instalment buying is not unusually high in relation to current national income, it does represent a greater amount of money than ever before. On any sign of a recession, banks would tighten up on such loans. Any dip in instalment buying would have a very noticeable effect on auto and appliance sales. More than 60 per cent of new car sales are currently being financed through instalment plans.

As against those factors pointing towards increased competition, there are others which seem to favor a continuation of good business. If easing of the world crisis makes it possible to reduce Government defense spending, then the prospects for cuts in corporation and individual income taxes are greatly improved. Such cuts in personal taxes would release substantial buying of consumer goods, while dropping of the excess profits tax would mean that companies would have more money to invest in new processes and plants. In many cases, capital goods spending by corporations, while currently at a very high level, has been held back by the difficulty of financing new plant construction. Lowering of corporation taxes would help to solve that problem.

Balancing the favorable and the unfavorable factors, it appears likely that many businesses are currently enjoying unusually good seasonal business. But

there is evidence that the seasonal patterns are back in the picture very strongly, as evidenced by keen competition for sales leadership in various fields, as well as by sharp price competition. Hence, a normal seasonal decline, such as comes in many metal working lines after July 1, could easily make its appearance this year, particularly in the auto industry, which has been producing at an abnormally high rate to meet the high spring demand. Even if defense spending remains at present levels, the business man must be prepared for such a sudden letdown in consumer buying. He must not be caught off his guard.

One of the best ways to prepare for increased competition is to institute short and long range planning programs, so that the right moves will be ready if demand slackens off, owing to seasonal or other factors. Product planning activities should be placed on a realistic, down-to-earth basis, so that the company can have ready for introduction new and improved models of its products, when these are needed to stimulate demand. The formation of a long range planning committee, headed by the chiefs of sales and product development will accomplish much.

The largest manufacturing companies have developed a procedure under which rescarch and development departments are ready at all times to offer improvements in design of old products, or entirely new products, whenever these are needed. While the average small manufacturer does not usually have the resources to carry on such a program, he has made progress at least, in planning the marketing of his product in such a way as to eliminate seasonal curves in employment by offering discounts.

By thus eliminating seasonal curves, many economies are being effected. The year-round operation of a plant means reduced overhead. Furthermore, labor turnover is cut to a minimum, and this can be an important item in production costs, particularly at times when labor shortages prevail in many areas.

A more cautious policy on inventories may prove to be necessary during the latter half of this year. If it appears that consumer buying is slowing down, and if the big strikes that cut production in 1952 fail to materialize. Today, as protection against strikes, many producers are trying to build up inventories of steel and components. They may reverse this procedure, if labor negotiations in steel, electrical equipment and other industries end peacefully. Conservative business men never lose sight of the fact that a 90 day inventory can become a 180 day inventory almost overnight, if buyers suddenly cut their purchases in half.

On the collective bargaining front, business men will have to operate more conservatively than they have done in recent years. For while labor remains tight in some areas and therefore would normally have a good bargaining position, it is still a fact the the recent declines in living costs have virtually brought new wage gains to a halt. Under those circumstances, employers must

be careful not to grant wage gains that outmatch those granted at the plants of competitors. Morever, wherever possible the employe should make counter-demands that will result in better production and improved worker morale.

With competition constantly becoming keener, consideration should be given to a special employe communications program which will acquaint employes with the meaning of competition in its relation to jobs, wage scales and steady work. One large corporation, Caterpillar Tractor, does not hesitate to show pictures, in the plant publication, of products produced by competitors. It drives home the point that unless workers emphasize quality and achieve good production records, the competitors' products may win out in the market place.

Mechanization of operations and improved materials handling methods are potent tools in cost reduction. Where plant and office modernization is needed to cut costs and place operations on a basis which will make it possible to meet competition, or to reduce prices, the investments should be made. But, industrialists are becoming increasingly wary of placing new large sums in overcomplicated equipment, particularly where adequate maintenance staff may be hard to recruit. On balance, surveys indicate that manufacturers are planning extraordinarily large investment programs during the next three years, but they are making sure that the machinery bought will pay for itself quickly.

It is still possible, in some cases, for defense producers to obtain certificates of necessity calling for accelerated depreciation. When such five year amortization certificates are obtained, they facilitate the financing of new investments, since the 20 per cent write off allowance each year sets aside cash for payment of the new equipment.

A new program is also under consideration in Washington which may make it possible for manufacturers to obtain new and improved machinery during the next few years at little or no cost, provided that they maintain their facilities in such a condition that they can be quickly converted to defense production.

This program is known as the Vance plan. Advocated strongly by Harold S. Vance, chairman of the board of Studeaker Corporation, it would mean that the Government would buy over \$100 million of new machine tools every year, to make sure that stand-by defense facilities would be ready to produce defense materiel quickly and efficiently, in the event of a new national emergency. By spending money for machinery, instead of producing a surplus of defense goods, big savings could be expected by the Government.

The plan has not yet been approved. Some industrialists are advocating that defense plants of the "dual purpose" defense-civilian type be allowed to use such Government owned equipment in civilian production, on the theory that it would be too wasteful to keep such standby plants completely idle. It is likely, however, that such permission would only be granted in cases where the civilian

plant can be converted to defense production with lightning speed.

The precautions that are being taken by industrialists to avoid getting too heavily in debt. and to cut costs, may not prove necessary if business stays on the present high plain. But such precautions will certainly do no harm if they succeed in eliminating wasteful practices which have crept in, and they will help to reduce the break even point. Since a reduction in taxes is likely to come within a year, a dollar saved in expenses may be worth much more in terms of net income than it does today under the excess profits tax.

## Reynolds Predicts Strong Aluminum Market

"Aluminum markets are expected to stay strong through the rest of 1953. The company's expanded facilities are operating at peak and forward business is at very high levels," was the statement made at the annual stockholders meeting of Reynolds Metals Company by R. S. Reynolds, Jr., president of the company. "Should there be any drop in military consumption, I am confident that the additional aluminum supply thus made available would be promptly taken up by civilian customers," Mr. Reynolds said.

Reynolds Metals and its wholly owned subsidiaries made a net profit of \$4,636,-263 for the first quarter of 1953, as contrasted to \$3,352,979 made in the first quarter of 1952. Net sales reported for the first quarter of this year amounted to \$71,637,818, an increase of 25 per cent over the sales reported for the same period in 1952.

"The industry's primary aluminum production," Mr. Reynolds declared, "continues to set new records as a result of the rapidity with which Reynolds Metals and the other producers expanded their capacity since Korea. During the first quarter of this year production was 27% greater than last year and also in excess

of the record quarter of World War II.

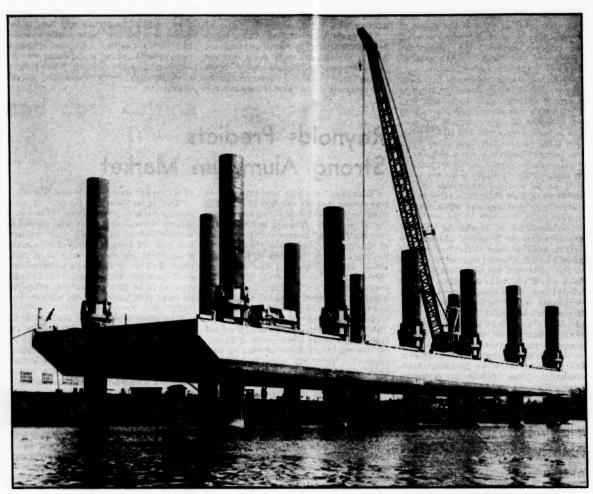
"The most notable feature of this rapidly mounting production is the wide-spread diversification among the consuming industries. When this country last attained a similar level of aluminum production, during the war year 1943, about 80% of it went into military aircraft. Now the military share of the total runs to 25 or 30% and of that probably no more than half goes into military aircraft.

"The other 70% is being fanned out to almost the whole range of civilian industry, including such big consumers as the construction, automotive, electrical, appliance and packaging industries. This general acceptance by industry of aluminum as a major basic metal, second only to steel now, provides greater stability for aluminum markets and stimulates their further growth.

"The outlook for aluminum continues to be bright, in our opinion, and we look forward during the months and years ahead to new opportunities for enlarging our markets and sales, especially as aluminum supplies not actually needed for defense are made available for civilian use."



"Somebody at the Keate Sash Weight Company wants the recipe for the sandwich dressing that got smudged on our letter to them!"



One of the DeLong-type barges during tests at the Orange, Texas, plant of U. S. Steel's Consolidated Western Steel Division.

The great air jacks circling the big tubes at deck level climb up the caissons, taking the hull up with them.

### The Dock That Jack Built

Down in Texas, Consolidated Western Steel Division of U.S.S. is building one of the most unusual dock-barge combinations ever conceived.

HE simple mechanical principle by which a small lad shinnies himself up a tree trunk has opened up a vast new field of steel fabrication that may well have revolutionary effects on military, offshore drilling and commercial port operations.

Engineers and steel fabricators have put the same tree climbing principle to work in a complex jack mechanism and designed around the jack a remarkable new steel dock that is rapidly changing the concept of harbor and drilling installations. The unique dock is built simply as a barge, floated to destination, "shinnied" up legs that it carries along, and installed as a permanent steel-strong dock.

Yet in a matter of hours it can pick itself up, hook onto a tug and be towed to a new location.

The dexterous units were quick to catch the eye of the military, whose transportation authorities saw their particular adaptability to military use. They already have proved extremely important to military operations, Besides their mobility, the sections can be used singly or erected end to end and welded together into a single dock of any desired length. Some of the first barges are serving as a dock at a Greenland station where they have met the test of severe Arctic weather and rugged harbor conditions.

Consolidated Western Steel, a Division

of U. S. Steel Corporation, has taken the lead in fabrication of the big barges. Its Orange, Texas, plant, which specializes in doing unusual things with steel, last year built three of the steel giants that wrote a new chapter in steel fabricating history. They were the largest of their type ever built up to that time and drew international attention to the plant and to Col. Leon B. DeLong, chief of DeLong Engineering & Construction Company of New York City, the designer.

The sections were towed individually more than 2000 miles across the Gulf of Mexico and up the Orinoco River in Venezuela to Puerto Ordaz, there erected into a single loading dock for the ore terminal of Orinoco Mining Company, a sister unit of U. S. Steel that is developing the Corporation's Venezuelan iron ore deposits. The job saw the Consolidated Western plant on its way to becoming the country's dock barge producing capital.

C. W. Lee, the Division's production vice president, reports that the plant has begun fabrication of six of the big barges for the Army. The first unit was

launched on April 18, with the remainder to be finished at the rate of better than one a month. They will be 300 feet long by 90 feet wide by 13 feet deep and weigh approximately five and a half million pounds each, or about a million pounds apiece more than the Orinoco sections. Two smaller such barges have just been completed at Orange and tested in the Gulf. In addition to those required to equip the Army units, the plant is currently building the two basic items in the design—jacks and caissons or tubes—in large quantities to outfit others whose hulls are being made elsewhere.

The U.S. Steel plant has worked closely with DeLong on the improvements that have produced the new facilities for the military planner, the oil driller and the port director. The dock barge has already evidenced through exhaustive testing and actual operation that it is one of the most revolutionary developments to come from steel design engineers and the fabricating industry. It has put mobility into marine loading docks once as stationary as the coast they served. It has blended in adaptability to invironment that has given a new face to docks and barges and a completely new twist to the transportation and harbor picture.

And for the Southwest's greatest industry, petroluem, the dual-function structure promises to be an important innovation in the offshore driller's program.

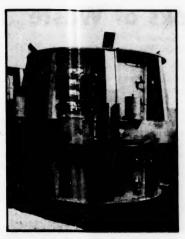
The DeLong designed unit represents as highly technical and precise a job as ever confronted a steel fabricator. The design demands engineering specifications which guarantee permanence and stability when the barge changes from sailor to landlubber, then perhaps back again to sailor. For it may put to sea again in search of other ports or on exacting soundings for tidelands treasures.

When it leaves the plant the dock barge floats and handles like any regular steel barge and except for two features in its construction is an ordinary barge:

The interior is laced with honeycombs of rigid steel ribs for Gibraltaran strength to shoulder the heavy loading duty to come. Secondly, spaced along the hull's port and starboard sides are a series of wells. Each well consists of a six foot diameter hole in the deck and a corresponding one in the bottom. The wells serve a highly important purpose when the barge reaches jobsite. Until then, the lower holes are bulkheaded.

The steel whale takes its gear right along, and the tools to put itself into business at its port of call. The gear bears little resemblance to that of any common seafarer, however. It consists by and large of a battery of steel tubes or caissons six feet in diameter, usually 100 or more feet long, and built from three-quarter inch plate. The tools are air jacks, one for each caisson. The caissons support the barge-turned-dock and the jacks take it up the caissons to pier height.

At destination, with the hull resting on the surface of the water, the big steel stilts are dropped through the wells—



Close-up shows construction details of the air jack, the key item in the design of the new dock barges.

and through the jacks set around the tops of the wells—to tideland or river floor. Then they are pile-driven through the sand to solid footing.

Then the jacks go into action.

Here's where the engineering principle comes in which the boy unwittingly employs in scaling a tree. The jack is the boy. It puts the principle into operation. The caisson is the tree trunk.

The jack in its own domain is nearly as remarkable a gadget as that human mechanism going up a tree. It's the cog around which the entire design was developed. In the simplest terms, the jack is a steel cylinder about seven feet high and just over six feet in diameter, with contoured ribs that give somewhat the illustion of a barrel. It is sliced horizontally across the center into two sections that function in much the same

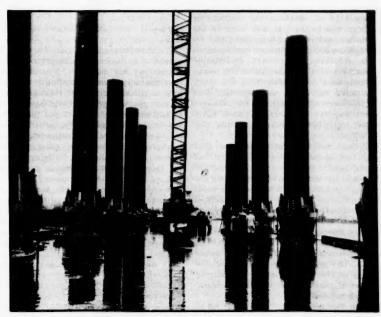
manner as the hands and legs of the tree climber.

The boy grips the trunk with his knees to prevent slipping as his hands reach upward for a grip. Then he loosens his legs, pulls himself up by his hands and again grasps the trunk with his knees. The hands go upward for a new hold and he repeats the operation. The upper half of the jack, like the arms, lifts the load. The lower section, like the legs, holds it in place while the top half reaches upward for a new grip on the caisson.

The jack works like this:

The top is bolted to steel tie-rods anchored to the deck. Both upper and lower halves of the jack are equipped with air-operated rubber grippers, tirelike tubes circling the inside wall between the jack and the caisson, Another set of similar tubes circle the caisson between the upper and lower jack sections. When the dock is in position and the caissons on bedrock the jack is raised six inches above deck level, Air is pumped into the rubber tubes of the lower half and it takes a firm grasp on the caisson. Next the rubber tubes between the jack sections are inflated. This forces the top half up six inches. The tubes in the top are then inflated, clamping the upper half to the caisson and holding the barge at that height, while the lower grippers are released and the center tubes deflated. The retraction pulls the lower section upward, where it is again clamped and the operation repeated. Thus, with all jacks working simultaneously, the entire hull climbs six inches at a time, each jack pulling itself and its burden up the caisson as deliberately as a ten year old adventurer boosts himself up a tree trunk with his beltload of paraphrenalia for a tree-top foray.

(Continued on page 52)



Deck view of the dock barge. The jacks climb the tubes just as a boy shinnles up a tree trunk.

### Management Looks at Waste

An address delivered by James F. Crist, President of the Southern Association of Science and Industry, and Vice President of the Southern Co., before the first annual Southern Industrial Wastes Conference, sponsored by the SASI.

N listening to the various discussions during this first annual Southern Industrial Wastes Conference, I realized more than ever before the great diversification of functions involved in pollution problems. To cope with the waste situation, we must consider economics, management policy, public relations, law, government, science, conservation, and a variety of other factors. I can think of no field in which a regular and free exchange of ideas could be more helpful.

We have learned some basic facts. We know, for example, that the word disposal is not synonymous with pollution. Pollution is a condition created by im-

proper disposal.

Fifty years ago, the disposal of industrial wastes was not a serious problem. Individual plants were much smaller and there were fewer cities. This country's population in 1900 was only 76 million as compared with more than 150 million at present. The pollution volume from both cities and industries was usually within the natural capacity of receiving streams to purify themselves. But industry grew and the cities came closer together so that some waterways were unable to digest adequately the increased amounts of sewage and industrial wastes entering them. The air in many localities became laden with smoke and nauseous fumes. Pollution was thus the outgrowth of industrial and population expansion.

The industrialists of fifty years ago frequently took a short-sighted view of the problem. Because of limited technical knowledge of methods for disposal of wastes and because it was hard to see a dollar and cents return from the required capital expenditures, management was reluctant to correct undesirable situations. If the wastes killed fish downstream or if the fumes from the stack destroyed vegetation and deposited soot on the housewife's washing, the management was apt to retort that such hardships were better than an empty pay envelope.

Today, management recognizes that pollution is bad business. Industry has found that it pays to create a good impression on customers, employees and the general public. Plants are built to meet the aesthetic as well as the practical eye. Attractive surroundings do improve employee morale and productivity. Foresighted managements are fully aware of the importance of their public relations and are constantly striving to improve them. The establishment of reasonable equity in the disposal of manufacturing wastes is essential to the maintenance of such relations.

With the great and continuing industrialization and development of the South, it cannot be expected that our

streams will retain their primeval purity nor that our air will be as clear and clean as that on the mountain tops. This would mean the abandonment of our industrial goals. The problem is how to attain those goals, so that equity exists for all our citizens; so that the public's rights are protected and industry is not



James F. Crist

burdened with unreasonable expendi-

We have learned that complete eliminination of pollution may be prohibitively expensive. For instance, I understand that the pulp mills in the South remove 90% of the chemical dust from their recovery stacks by installing equipment with costs around \$650,000 for the average mill. To remove 95% of the dust would require twice this expenditure and it would require many times this amount to remove all of the dust. Existing plants are faced with such economic problems and we must not forget these facts.

In the case of new plants, however, it is possible to apply advanced techniques to minimize pollution difficulties. The old axiom that an ounce of prevention is worth a pound of cure certainly applies to handling of waste problems in industrial installations.

We have only to look to certain sections of the East and Midwest to find serious waste problems brought on by industrialization without adequate planning. In some sections there are streams so heavily polluted that water is no longer useful even for industrial pur-

poses. Swimming and fishing have long since been impossible.

Recently eight states of the Ohio River Valley have joined together in an interstate compact to solve on a local basis, without Federal aid, the pollution problem which has made an open sewer of the once beautiful Ohio River. Here every major stream in the basin of the 1,000 mile river has become seriously polluted. The Commission which administers this compact studied the relation of pollution to the self-purifying abilities of streams, oxygen balance and toxicity tolerances. Much progress has been made in the installation of sewage treatment plants by municipalities, and, on the industrial front, the Commission has gained the support of top-level management.

The South is blessed with a wealth of natural resources. Foremost among these are its great river systems. Yet indifference or the failure to live up to our own responsibilities for waste disposal could soon destroy this priceless asset.

Municipalities, too, must face up to this responsibility. They must provide adequate sewage treatment facilities if our streams are to be kept useful for industrial and other purposes. This becomes more apparent as further industrial development places a greater load on the streams of the South. Any wellcoordinated program of water resource development will include the provision of suitable treatment plants in all major communities.

Few industries are so fortunate as to escape some type of waste problem. It is perhaps safe to say that one-third of all new manufacturing plants must cope with a significant disposal problem. SASI has reported that new multi-million dollar plants are being added in the South at a rate of one each working day -more than 300 per year. This means that at least 100 major waste disposal problems must be solved each year. If they are not properly solved we can accumulate a great number of bad situations within a few years.

We, in the electric utility industry, have our disposal problems also-those which we create and those which others

First we must consider pollution from waste products discharged from our coal fired steam generating stations. The flue gases leaving the stack are contaminated with very small particles of ash. On pulverized coal boilers this ash is called "fly ash" because of its minute particle size-75% to 90% will pass through a 325 mesh screen. The quantity of ash will vary from 1 to 4 grains per cubic foot of flue gas, depending on the amount of ash in the coal and the performance of the pulverizing equipment and burn-

Because the particles are so small the fly ash discharged from a stack is dispersed over wide areas, the size of the area depending on prevailing winds, height of the stack above ground, velocity of the flue gas at the stack outlet, and the size of the ash particles. All of these factors are considered in the design of a coal burning steam plant. The amount of air pollution can be minimized and controlled through the installation of dust collecting apparatus and by altering the height, size and location of the stack, as dictated by a study of surrounding contours and adjacent populated areas and industries.

Dust collectors may be mechanical or electrical, or a combination of the two, installed in series. The mechanical collectors are least expensive, about 85% efficient and more effective in removing the larger sized particles. The electrical collectors are more expensive, about 90% efficient, and are more effective in removing the smaller particles.

All of our modern coal-fired plants are equipped with dust collectors, either mechanical or electrical, depending on the conditions at each location. The costs for controlling air pollution in this manner are substantial, running from \$2 to \$3 per kilowaft of plant capacity, and there are the operating and maintenance costs.

The second source of contamination from a coal-fired steam generating plant relates to the accumulation and disposal of not only the fly ash but the "bottom" ash collected in the main hopper beneath the furnace. These waste materials are pumped hydraulically to a disposal area, usually a natural ravine wherein the ash is impounded by means of a dike. If no natural depression is available then it must be excavated.

Ash disposal and storage is a real problem and a costly one. A 40,000 KW unit, operating at 60% annual load factor, will produce a cumulative quantity of ash requiring a storage volume of approximately 6 acre-feet (one acre—six feet deep) annually. Assuming a 30 year plant life, the total storage volume for ash disposal becomes 180 acre-feet (say 18 acres 10 feet deep). These figures are quoted to give an idea of the magnitude of the problem. For larger units, the figures are proportionately increased.

If provisions for storage were not incorporated in the design, most if not all of the ash would find its way back into the stream from which the condensing water is obtained.

Our industry uses large quantities of water in two of its operations. The first and largest use is in the operation of its hydro plants where the power generated is a function of the water used and the head through which the water passes. In this operation the quantity of the water and not the quality is the important factor. Pollution is rarely a factor in either hydro plant operation or new hydro plant location.

The second operation where large quantities of water are used is in the operation of steam plants. Steam plants require approximately one gallon of cooling water per minute per kilowatt of installation, in other words a 200,000 kilowatt plant requires about 200,000 gallons per minute. The pollution problem here is of major importance because this water must pass through a large number of small diameter tubes and any substantial pollution causes rapid clogging of these condenser tubes and actual cor-

sults in plant ortages for tube cleaning and frequent tube replacements. Because of this condition our companies have had to discard whole areas for prospective steam generating plant sites and spend large sums to bring unpolluted water to an existing site because of polluted water conditions. An instance of the latter situation is at a large steam plant where the condensing water intake is located on a sizable tidal stream and the discharge is into a tidal branch which joins the main stream about a mile below the plant, thus providing a long recirculating path for the condensing water. This long path was desirable because of the low minimum flow of the tidal stream and the high water temperatures encountered. Near the confluence of the main stream and the branch several industrial plants discharge wastes into the stream. At average stream flows the volume of condensing water pumped is greater than the stream flow so there was a definite flow of water through the recirculating path, affected from time to time by tidal action. Thus the circulating water picked up considerable quantities of waste materials and the situation was aggravated by tidal action.

Fortunately a remedy was available. There is another larger stream, with greater flow and fresh water content about two miles from the condensing water intake. A canal was cut through the marshlands to interconnect these streams above the intake and a large capacity, low-head pump was installed at the plant end of the canal. Operation of the pump greatly increased the flow of fresh water, counteracted the tendency toward recirculation, and kept the wastes below and out of the recirculating path. As soon as the canal went into service the power plant operation and maintenance were quickly normalized. This remedy was effective but expensive. It cost more than \$500,000.

Perhaps the most complex waste disposal problems are encountered by the pulp and paper industry. Manufacturing plants are so large and the volume of effluents is so great that waste handling is a major factor in plant location and operation. Both air and stream pollution are major headaches to the entire industry and millions of dollars have been spent seeking satisfactory solutions.

No other industry offers a better example of the situation that confronts the South. We must recognize, first, that the pulp and paper industry is one of our most valuable assets. More than half of the land area of the South is particularly well suited to the growth of trees. With a climate and soil which can reproduce trees much faster than is possible in other areas, the South is attracting forest-based enterprises on an everwidening scale.

Today, there are operating in the Southern states more than 60 large paper and pulp mills having a daily capacity of nearly 25,000 tons. Nine new mills, involving an investment of \$200 million, are under construction and the region is

rosion of the tubes themselves. This rerapidly gaining national leadership in sults in plant ortages for tube cleaning this industry.

It is imperative, therefore, that we not discourage the growth of this important industry. Moreover, we must realize that the nation's insatiable appetite for paper will very probably require substantial expansion of this industry in the years immediately ahead. The South must continue to provide new sites for mills for the production of newsprint and other products.

While there are still some excellent sites available in the South, we may soon reach a point at which sites are difficult to find unless improvements can be made in processing operations. Such improvements could very appreciably modify site requirements so that a much larger number of locations could be considered by the industry. This is a complex problem even for the experts in the field and we simply wish to point out that the continued rapid growth of many major Southern industries may be dependent on satisfactory solution of waste problems.

Fortunately the South is being developed at a time when advanced technological methods are available for solving many industrial waste problems. While there are many others for which satisfactory solutions are not yet available, we can, by applying available information, greatly reduce or eliminate pollution problems in our industrial areas.

It should be emphasized that we are primarily interested in promoting the further industrial development of the South. Nothing that has been said at this conference should be construed otherwise.

We want to continue to bring new industries into the South and to expand the industries that already exist here. We do not want to impose any unnecessary restrictions or regulations on any of our industries, old or new. Our interest is in promoting the exchange of information whereby the business community and the public can enjoy the mutual benefits of an improved economy and a higher standard of living.

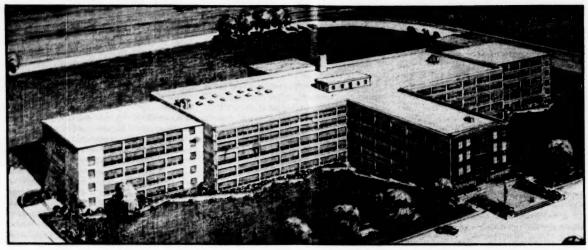
There are many industries and many municipalities in the South which have faced squarely the waste and pollution problem and are effectively coping with it. We salute them and they deserve to rank among our first citizens.

We are greatly encouraged, therefore, that the South is alert to the necessity of tackling these waste problems. The excellent attendance we have had at this conference furnishes evidence that industrial and governmental groups throughout the region are anxious to develop an intelligent coordinated attack on such problems.

While some of the problems we face are going to be difficult to solve satisfactorily, we must be inspired by the fact that the rewards for success will be great. If we can achieve a high degree of coordination in our development efforts, we can, within a few short years, make the South one of the most prosperous areas in the world.

We have the people and the resources. It is up to us to devise the methods.

### CONSTRUCTION



New \$6,000,000 technical high school under construction at St. Louis, Mo. Bids will be opened in July. F. Ray Leimkeuhler is the supervisory architect for the St. Louis Board of Education.

## **April Awards Total \$305,645,000**

By. S. A. Lauver News Editor

SOUTHERN construction contracts in April totaled \$305,645,000, bringing the aggregate for the year so far to \$1,238,062.000

Compared with the figure for the same month of last year, the current April total is down thirty-four per cent; with the preceding month, nine per cent. The fourmonth total represents a drop of about twenty-four per cent.

April's \$305,645,000 included \$81,844,000 for highways and bridges; \$69,201,000 for public building; \$62,361,000 for heavy engineering construction; \$54,563,000 for in-

dustrial projects and \$37,676,000 for private building.

The \$81,844,000 highway and bridge figure is the largest since last December. Not only is it well in excess of any of its predecessors of this year, but it is fifteen per cent ahead of its April, 1951, counterpart

Public building, second largest of the five construction categories, declined thirty-one per cent last month. Components of the \$69,201,000 total are \$46,392,000 for schools and \$22,809,000 for government building, the latter dropping sixty-

seven per cent, while the former rose forty-five per cent.

Heavy engineering construction, with its \$62,361,000, was the second of the two categories showing greater strength in April. Up fifteen per cent, the current figure includes \$35,074,000 for dams, drainage, earthwork and airports; \$13,405,000 for government electric projects and \$12,882,000 for sewer and water work.

All of the heavy engineering elements showed increases, when compared with figures for similar work in the preceding month. The \$35,074,000 for dams, drainage, earthwork and airports was up twenty-three per cent; the \$14,405,000 for government electric work, up one per cent; the \$12,882,000 for sewer and water work, up eleven per cent.

Industrial construction, as reported in the daily bulletin of the Manufacturers Record, declined sixteen per cent. Despite this apparent slackening of such work, several sizable projects included the \$22,-800,000 Remington-Rand addition to the Minden ordnance plant; the \$3,500,000 Worthing air conditioning plant at Decatur, Ala.; the \$2,000,000 addition to the Hampstead plant of Black & Decker Manufacturing Co., and a \$1,200,000 plant expansion of the Hunter Fan & Ventilating Co. at Memphis, Tenn.

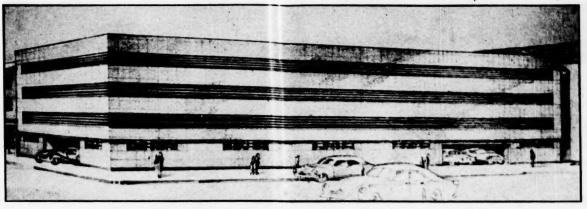
Private building, total for the month \$37,676,000, consisted of \$25,354,000 for residential work; \$5,630,000 for office building, \$5,096,000 for assembly building, and \$1,596,000 for commercial building. The residential figure represents a rise of six per cent, compared with the level of such work in the previous month.

Southern construction in the first four months of this year, while moving at a tremendous pace, has not shown the impetus predicted in forecasts at the begin-

#### SOUTH'S CONSTRUCTION BY TYPES

2001H 2 CO	MOIKUC	HION B	IILE2	
	A	pril. 1953	Contracts Awarded	Contracts Awarded
		Contracts	First Four	First Four
PRIVATE BUILDING	Contracts Awarded	to be Awarded	Months 1953	Months 1952
Assembly (Churches, Theatres, Auditoriums, Fraternal) Commercial (Stores, Restaurants,	\$5,096,000	\$8,825,000	\$22,860,000	\$20,210,000
Filling Stations, Garages) Residential (Apartments, Hotels,	1,596,000	23,841,000	35,238,000	9,763,000
Dwellings) Office	25,354,000 5,630,0000	18,790,000 19,452,000	141,131,000 37,412,000	265,890,000 11,437,000
	\$37,676,000	\$70,908,000	\$236,641,000	\$307,300,000
INDUSTRIAL	\$54,563,000	\$423,683,000	\$263,533,000	\$558,165,000
PUBLIC BUILDING City, County, State, Federal and				
Hospitals	\$22,809,000 46,392,000	\$83,889,000 80,904,000	\$153,451,000 138,406,000	\$225,551,000 111,094,000
	\$69,201,000	\$164,793,000	\$291,857,000	\$336,645,000
ENGINEERING Dams, Drainage, Earthwork and Airports Federal, County, Municipal Elec-	\$35,074,000	\$24,931,000	\$152,947,000	\$188,534,000
tric Sewers and Waterworks	14,405,000 12,882,000	$\substack{1,400,000\\17,128,000}$	41,906,000 53,363,000	24,826,000 48,267,000
ROADS, STREETS, BRIDGES	\$62,361,000 \$81,844,000	\$43,459,000 \$123,370,000	\$248,216,000 \$197,815,000	\$261,627,000 \$185,760,000
TOTAL	\$305 G45 000	8876 713 000	\$1 999 BC9 BBB	21 649 497 000

## CONSTRUCTION



Five-level parking garage to be constructed in Baltimore, Md., will accommodate 300 cars.

ning of the year. The figure for awards so far, as compiled from daily construction bulletin reports, is \$1,238,062,000, this a decline of twenty-four per cent.

Making up the \$1,238,062,000 grand total for four months of southern construction were \$291,857,000 for public building; \$263,533,000 for industrial projects; \$248,-216,000 for heavy engineering construction; \$236,641,000 for private building and \$197,815,000 for highways and bridges.

Highway and bridge work is the one category where encouraging activity has resulted in a larger total in 1953 than in the same period of the preceding year. The \$197,815,000 is approximately six per cent ahead of the total reported for similar work in the first four months of 1952.

Public building attained the largest total among the five categories. Its current \$291,857,000 includes \$153,451,000 for government buildings and \$138,406,000 for schools. While the government building figure is down thirty-one per cent, school building this year shows a rise of twentyfour per cent.

Industrial construction during the last four months seems to be marking time, although quite a few large projects have been announced. For instance, the newsprint mill at Evsdale, Texas, will cost \$22,000,000. A Solvay Process division project at Moundsville, W. Va., involves a \$15,000,000 expenditure. Grace Chemical Co. is spending \$19,000,000 for its nitrogen plant near Memphis, Tenn.

The \$248,216,000 for heavy engineering construction in the South comprises \$152,-947,000 for dams, drainage, earthwork and airports; \$53,363,000 for sewer and water work, and \$41,906,000 for government electric work.

The dams-drainage-earthwork-airport figure represents a drop of eighteen per cent. The sewer and water work total of \$53,363,000 is ten per cent greater than it was at this time last year. Government electric projects show a sixty-eight per cent rise.

Private building's \$236,641,000 embraces \$141,131,000 for residential construction; \$37,412,000 for office building; \$35,238,000 for commercial building and \$22,860,000 for assembly building, the latter three up

thirteen, 259 and 227 per cent, respec-

Countrywide expenditures for construction put-in-place, as distinguished from new awards, amounted to \$2,600,000,000, according to the joint announcement of the Labor and Commerce departments, which noted that the figure was an increase of eight per cent above the preceding month and of five per cent above April of last year.

Private outlays of \$1,801,000,000 were estimated by those government agencies, this representing a five per cent rise from March "mainly because of the rise in residential and public utility construction." Seasonal gains were also seen in road-building and in public industrial plant, such as the atomic energy facilities, which the two federal statistical agencies said "accounted for more of the fourteen per cent rise to an \$837,000,000 total for new public construction."

Value of new work done on private nonfarm residential building throughout the country was placed at \$887,000,000 during April, this about six per cent above the March figure and approximating a four per cent gain above April of 1952. Private building in the country, as in the South, was down. The Labor-Commerce department announcement said there are indications of "some further tapering of expenditures on this work." April expenditures for commercial construction and most other major types of private non-residential building was seen holding about even with March, and except for hospital work, were "considerably above outlays during April, 1952." Private expenditures for new work on public utilities, especially electric power and gas facilities, were said to be on a continued upward trend.

Military and naval expenditures for new construction showed a less than seasonal rise during April, while public outlays for hospitals and schools were said to remain at the March level. Monthly expenditures for construction of penal and corrective institutions this year, the two agencies said, are running at double last year's rate.

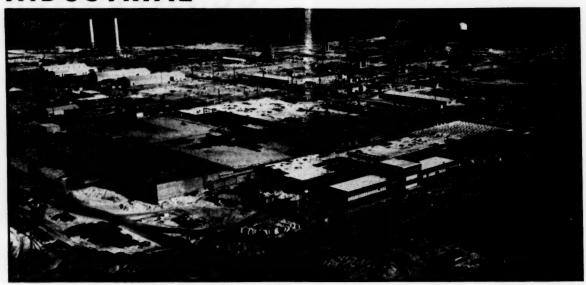
The \$185,000 spent for new work on highways during April chiefly reflected outlays by state and local governments. For public construction as an entirety, state and local funds was seen accounting for about fifty-five per cent of the total of public expenditures this year and in 1952, as compared with sixty-two per cent in 1951 and seventy per cent in 1949 and 1950.

During the first four months of 1953, the total value of new construction was placed at more than \$9,600,000,000, compared with \$9,100,000,000 in the corresponding period of 1952.

#### SOUTH'S CONSTRUCTION BY STATES

	April	, 1953 Contracts	Contracts Awarded First Four	Awarded First Four
	Contracts	to be	Months	Months
	Awarded	Awarded	1953	1952
Alabama	\$15,874,000	\$12,320,000	\$58.811.000	\$105,117,000
Arkansas	7.888.000	3,070,000	24,533,000	30,481,000
Dist, of Col.	16,796,000	3,401,000	29,374,000	26,580,000
Florida	13,345,000	14,512,000	98,526,000	186,130,000
Georgia	11,343,000	24,822,000	84,178,000	111,999,000
Kentucky	4.020.000	43,650,000	23,877,000	43,571,000
Louisiana	41,712,000	55,447,000	110,197,000	148,108,000
	28,933,000	99,414,000	92,869,000	163,066,000
			27,871,000	
Mississippi	5,758,000	5,549,000		49,360,000
Missouri	20,908,000	42,230,000	51,142,000	34,695,000
N. Carolina	15,784,000	30,767,000	63,227,000	90,668,000
Oklahoma	6,535,000	80,675,000	26,035,000	43,020,000
S. Carolina	9,732,000	6,730,000	54,962,000	42,868,000
Tennessee	9,040,000	31,255,000	54,904,000	61,075,000
Texas	63,256,000	123,963,000	293,188,000	382,841,000
Virginia	11,793,000	28,758,000	60,766,000	92,322,000
W. Virginia	22,928,000	219,650,000	83,602,000	37,596,000
TOTAL	\$305,645,000	\$826,213,000	\$1,238,062,000	\$1,649,497,000

## INDUSTRIAL



## IN FLORIDA

Construction progresses on the Chemstrand Corporation's new nylon plant near Pensacola. This multi-million dollar installation embraces two basic areas—the chemical area where the intermediates are produced and the textile area where the fiber will be spun.



## IN SOUTH CAROLINA

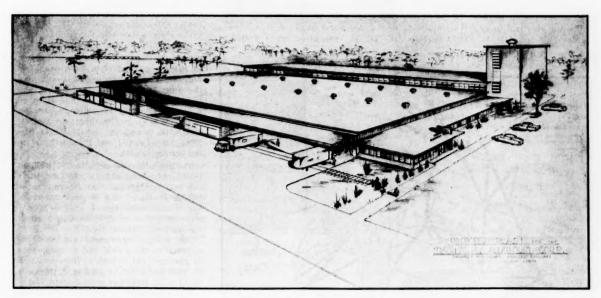
The U. S. Plywood Corporation recently completed the third of three expansions at its Orangeburg plant. The most recent is an office addition to the left front. The first part of the program consisted of the plant addition to the left. Daniel Construction Co. handled the jobs.

## **EXPANSION**



## IN TEXAS

Construction is well along on this \$30,000,000 dual-purpose plant being built by General Motors Corporation at Arlington. G. M.'s Buick-Oldsmobile-Pontiac Division will employ 6,000 workers in the plant which is easily adaptable to aircraft production.



## IN MISSISSIPPI

The Mississippi Aluminum Corporation has planned this large \$2,500,000 aluminum tubing plant for Gulfport. The construction of the plant was made possible by municipal financing—a bond issue covering the cost of the land and building—of the type so widely used in the state under its BAWI plan.

## Delta-C & S Operating as Nation's Fifth Largest Domestic Airline

HE merger of Delta Air Lines and Chicago & Southern Air Lines, linking 61 cities in the United States and the Caribbean area, was approved on April 22nd by stockholders of both companies.

A closing meeting on May 1 in Atlanta, Ga., saw the completion of final legal details and the two companies began to operate as a consolidated airline.

The merger, which required ratification by two-thirds of the stockholders of both companies, received overwhelming approval by stockholders of both airlines. Delta stockholders voted 93½ percentage of outstanding shares in favor of the merger and C & S stockholders voted 88 percentage of outstanding shares in favor.

Delta stockholders met in Atlanta where they voted 561,163½ shares for the merger, with only 76½ shares against the merger.

In Memphis, C & S stockholders voted 448,658 shares favorably and 5,996 shares against the consolidation.

The operating name of the continuing company is Delta-C & S Air Lines. General offices are in Atlanta, Ga. Maintenance and overhaul bases are maintained in Memphis and Atlanta, Flight person-

nel is based in Chicago, Memphis, Atlanta, Dallas, Houston, New Orleans, and Miami.

The consolidated company has 4,250 employees stationed in 61 cities. Delta employs 2,750 and C & S 1,500.

The combined fleets include 7 DC-6s, 6 Constellations, 31 DC-3's, and 20 Convair 340's (some of these still remain to be delivered throughout the balance of 1953). On order for early 1954 are 4 DC-7's.

Delta's 10-member board of directors meeting in Atlanta on May 1, added three C & S representatives to the Board, including:

Carleton Putnam, founder and chairman of the board of C & S who was named chairman of the board of the consolidated company; S. A. Stewart, president of C & S, named executive vice president of the consolidation, and John R. Longmire, St. Louis, C &S director, who was elected a Delta-C & S director.

The following were elected officers of the merged company:

Carleton Putnam (C & S), chairman of the board; C. E. Woolman (Delta), president and general manager; S. A. Stewart (C & S), executive vice president;

Junius H. Cooper (C & S), vice president-finance; Todd G. Cole (Delta), vice president-comptroller and assistant secretary; R. S. Maurer (C & S), vice president-legal; Laigh C. Parker (Delta), vice president-traffic; T. M. Miller (C & S), assistant vice president-traffic; Charles H. Dolson (Delta), vice president-operations; W. T. Arthur (C & S), assistant vice president-operations; C. H. Mc-Henry (Delta), secretary; Travis Oliver (Delta), treasurer; and Catherine Fitz-Gerald (Delta), assistant treasurer.

The consolidation of the two companies makes Delta-C & S the fifth largest domestic airline in the U. S. based upon total revenue passenger miles flown. Routes totalling 9,508 miles serve 55 cities in the U. S. and six cities in the Caribbean. Delta's system totals 3,654 miles, serving 33 domestic cities in 12 states, with a population of over 13 million.

Domestic routes of C & S total 2,820 and its international route measures 3,034, or a total of 5,854 miles. Population of the 22 domestic cities located in 11 states totals 16 million, and over 2 million in the six cities on the C & S international system.

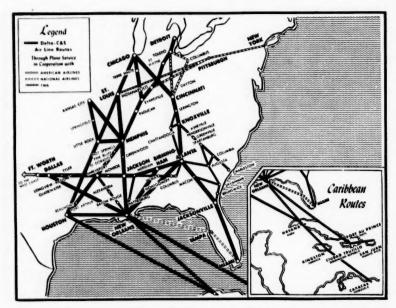
Both companies operate south from Chicago and also criss-cross at Shreveport, Louisiana; Jackson, Mississippi; New Orleans, Louisiana, and Anderson-Muncie-New Castle, Indiana.

Delta's system runs from Chicago to Miami and from Charleston, South Carolina to Dallas-Fort Worth, crossing to Atlanta. The C & S system is also X-shaped, running from Detroit to Houston and from Chicago to New Orleans, crossing at Memphis, with international routes extending across the Gulf of Mexico to Puerto Rico and Venezuela.

On April 1, C & S and TWA inaugurated interchange service from Houston to Pittsburgh and New York over two different routes, one via St. Louis, and the other via Shreveport, Memphis, and Indianapolis. This interchange is to be continued, as are interchange services with TWA from Cincinnati to Detroit and with American and National Airlines from Florida and the southeast to the Pacific Coast.

The consolidation of Delta-C & S called for the exchange of \$10,695,846 of Delta's five and one-half per cent debentures for 509,326 shares of C & S stock outstanding. These were issued at the May 1 meeting and exchanged for C & S stock through an Atlanta bank.

The merger agreement was first announced to the public and to employees by management of both airlines on April 25, 1952, and officially filed with the CAB on April 28. Hearings were held in Washington starting on August 11 and briefs to the CAB examiner were filed on September 22. On September 24 the Bureau Counsel recommended that the merger be approved and on November 13 the Board Examiner approved the consolidation. On December 31, 1952, the CAB approved the merger, with the concurrence of the President of the U. S., whose approval was required because of the international routes involved.



This map shows the consolidated system of Delta-C&S Air Lines. The combined system includes 61 cities in the United States and West Indies, The consolidation was effective on May 1 when stockholders of both companies approved the merger.

## **SOUTHERNERS AT WORK**

#### W. Cooper Green Assumes Post with Alabama Power

William Cooper Green, formerly mayor and president of the City Commission. Birmingham, Ala., has assumed his new duties as vice-president in charge of the Industrial Development Commission of Alabama Power Co. Mr. Green had served Birmingham as its mayor since 1940. He is largely responsible for the outstanding progress that Birmingham has made in the past 10 years with regard to civic improvements of all kinds. He is responsible for the building of a new \$4,000,000 Birmingham City Hall which is paid for; he saw to it that 20,000 seats were added to the municipal stadium; that 11 parks for negroes were opened.

Other improvements during his tenure in office included the purchase of the Birmingham waterworks system which is now running at a profit, and the major enlargement of the city's airport.

Mr. Thomas W. Martin, Chairman of Alabama Power Co., speaking at a recent testimonial dinner for Mr. Green, referred to him as a man the city should take great pride in for his leadership in so many worthwhile movements. He predicted that Mr. Green would be one of Alabama's great industrial leaders in the years ahead. With regard to his work with the power company, Mr. Martin spoke of him as a man who will bring to his new work a comprehensive knowledge of the state, its people, its resources and its needs.

Mr. Green is a native of Birmingham. He was educated in the city's public schools and at Birmingham Southern College. He began his business career as a real estate and insurance broker in Tarrant City in Birmingham. He started his career in public office as a member of the State Legislature, representing Jefferson County, during the administration of Gov. B. M. Miller, 1931-33. Mr. Green was appointed Postmaster in 1933, and served in this post for seven years. He was elected Mayor and President of the City Commission of Birmingham on February 29, 1940, to fill the unexpired term of the late Jimmy Jones. He has been re-elected for three 4-year terms, the last, 1949, by the largest vote ever received by a candidate for this office.

## Booth Retires, Cox Named Vice President of N&W

I. Walter Booth, Norfolk and Western Vice President in charge of finances and a director, retired April 30 after 51 years of continuous service with the railway. He is succeeded by L. W. Cox, secretary of the company.

The new secretary is W. H. Ogden, former assistant secretary. R. D. Hoffman, former assistant to treasurer, will

be assistant to vice president in charge of finances, a new position, and G. C. Armstrong, former assistant treasurer, will be assistant treasurer and assistant secretary. F. R. McCartney, chief clerk, has been advanced to assistant secretary and assistant to treasurer. All have headquarters in Philadelphia. The changes were effective May 1.

Mr. Booth joined the N. & W. on May 1, 1902 at the age of 19 as clerkstenographer to the secretary and assist-



L. W. Cox

ant treasurer. He became chief clerk in July, 1911. After night work at the University of Pennsylvania he graduated in accounting in 1914 and was promoted that year to assistant secretary and cashier. He became secretary and assistant treasurer in March, 1920 and was appointed vice president in charge of finances on January 28, 1936. He became a member of the board of directors on February 1, that year. He is a former president of the Railway Treasury Officers Association and a member of the Newcomen Society.

Entering N. & W. service as a clerk in the office of the secretary and assistant treasurer on June 1, 1910, Mr. Cox was advanced to assistant secretary in March, 1920 and to secretary in January, 1939. He is a graduate of the University of Pennsylvania's Evening School of Accounts and Finance.

#### R. S. Lynch Honored As Steel Industry Leader

Robert S. Lynch, president of the Atlantic Steel Company, Atlanta, Georgia, was honored at the recent annual meeting of the Kiski Valley Enterprises and the Vandergrift Chamber of Commerce,

Vandergrift, Pennsylvania, with the Kiski Valley annual award in recognition of personal accomplishments and contributions to the American steel industry.

Milton E. Uncapher, Jr., a director of the Vandergrift Chamber of Commerce, presented a bronze plaque to Mr. Lynch on which was inscribed: "To Robert Scott Lynch, a native of Kiski Valley, who has risen to a position of the greatest importance in the American Steel Industry and in the Industrial Field of business. The plaque is awarded as a token of the pride taken in his achievements by the neighbors of his youth at 1953 Industrial Appreciation Banquet by Kiski Valley Enterprises, Inc., and Vandergrift Chamber of Commerce."

More than 500 business and industrial men from all parts of the Kiski Valley attended the annual Industrial Appreciation dinner at which Mr. Lynch was honored. The affair was the largest ever held in Vandergrift and marked the launching of the Kiski Valley Enterprises, Inc., recently organized to interest new industries to locate in that area.

#### Greensboro Industries Name N. P. Hayes, President

Greensboro Industries, Inc., has announced the election of N. P. Hayes, president of the Carolina Steel and Iron Co., as president of its organization.

Mr. Hayes, a civic leader and former president of the Greensboro Chamber of Commerce, succeeds John Harden, vice president of Burlington Mills, who was named to the industrial group's vice presidency.

Greensboro Industries members elected three new directors. They were Hayes, J. T. Collins, vice president of Mock Judson Voehringer and H. L. Coble, president of Coble Construction Co.

## ACMI Head Cites Evils Of Excessive Taxation

Present depreciation allowances for tax purposes are making it impossible for the nation to achieve maximum economic stability, the executive vice president of the American Cotton Manufacturers Institute declared here today.

Addressing the annual convention of the Cotton Manufacturers Association of Georgia, Robert C. Jackson, Washington, D. C., said:

"Economic progress in America is related directly to its program of continued expansion. From the day the Constitution of the United States came into being, this country has never stood still for long. The economic strength of our nation comes from its ability to grow, to pioneer,

(Continued on page 42)

## Southerners

(Continued from page 41)

to develop something new, to provide more and better things for more people.

"Nothing can more surely stop this growth than too big Government and its inevitable counterpart—paralyzing taxation. Not only does such taxation destroy initiative, incentive and enterprise, but it breeds fear, indecision and indifference."

Jackson said that such taxation also "gives plausibility to the charge that our country can be 'threatened' by peace, that the United States cannot prosper without war, that our system cannot be sustained without the inflationary stimulus of continued huge expenditures for national defense."

The ACMI executive told the textile executives, their suppliers and guests at the Boca Raton Hotel and Club that "No one can be complacent about a situation which so clearly strikes at the very foundation of our economic system." He warned that "irresponsible spending and excessive taxation" must be reduced at all levels of government.

#### Central of Georgia Elects A. W. Ledbetter, Chairman

Allison W. Ledbetter, of Rome, Ga., was elected Chairman of the Board of the Central of Georgia Railway at the annual meeting of stockholders and directors in Sayannah last month.

Ben J. Tarbutton was re-elected as President and all other executive officers were re-elected.

The annual report for 1952 was received. It showed the largest operating revenues in the history of the company, in excess of \$43 million. The year marked the conversion from steam to diesel power. Industrial development in the territory continued the steady advance that has been made during the past decade, and the Agricultural Development Department carried on its program for improvement of conditions with particular attention to livestock and forestry.

Chairman Ledbetter, who has been a member of the Board of Directors since April 30, 1945, and Vice Chairman since July 21, 1950, expressed every confidence in the continued progress of the Central. The property, he said, is in good physical condition, officered and manned by capable and experienced men, a combination which he believed would assure successful and efficient operation.

Said he: "Assured as I am of co-operation from the public, our patrons, our employees, and our official staff headed by Mr. Tarbutton, I believe firmly in the future of the Central of Georgia as a service institution of great value to the territory as a factor in the development of the territory."

Mr. Ledbetter succeeds as Chairman, Patrick B. McGinnis who resigned effective April 2. The new Chairman was born in Rome where he now lives and has

spent his entire life. He has been in the contracting business for 27 years and is prominent in road construction in Georgia, Alabama and Tennessee. He is President and owner of Ledbetter-Johnson Company, Ledbetter trucks, Incorpo-



A. W. Ledbetter

rated, Ready Mix Concrete Company, Industrial Supply Company and Rome Warehouse, all located in Rome.

In addition to his membership on the Central of Georgia Board of Directors, he is a Director of Alabama Mills, Birmingham; Anchor Rome Mills, Rome; First National Bank, Rome; Gas Light Company of Columbus; and Georgia Power Company, Atlanta.

#### Georgia Ports Authority Names Two Representatives

Appointment of two new regional representatives of the Georgia Ports Authority, owners and operators of the \$6,000,000 new Savannah State Docks, has been announced by William R. Bowdoin, of Atlanta, chairman of the authority.

Brig. Gen. Hugh T. Mayberry, (USA Ret.) and Tom Talmadge will represent the Georgia Ports Authority in the Wash-



T. Talmadge

H. T. Mayberry

ington D. C.-area and Chicago-area respectively, Mr. Bowdoin said.

Gen. Mayberry, who retired Dec. 31, 1952, from the regular Army after 35 years service, is a former commander of the Port of Bremerhaven, Germany. While at Bremerhaven, he directed the reorganization and development of that port and had charge of both military and civilian shipping activities.

During his Army career, Gen. Mayberry has served in a number of administrative and executive capacities. He organized, built, developed and directed the operation of the Tank Destroyer School at Fort Hood, Texas, during the period of 1941-44. He is a graduate of William Jewell College and attended Rensselaer Polytechnic Institute.

Mr. Talmadge has had wide experience in the field of foreign trade, having been associated with Pan American-Grace Airlines as an executive in the operations department. While with the airline, he spent four years in South America with headquarters in Lima, Peru. Later, he established his own distributing business in North Carolina.

A native of Forsyth, Georgia, Mr. Talmadge graduated from the University of Georgia and attended Columbia University—having studied foreign trade at both institutions. He is an uncle of Georgia's Governor Herman Talmadge.

## Glenn L. Martin Announces Two Executive Appointments

The Glenn L. Martin Company, Baltimore, Md., has announced two executive personnel additions.

Carl B. Allen, noted military affairs correspondent and aviation editor, of the New York Herald Tribune, based in the Washington bureau of that newspaper, has been appointed special assistant to George M. Bunker, president of The Glenn L. Martin Company. Lawrence E. Chermak resumes his civilian law career by joining the legal staff of Martin, terminating his present post as Counsel to the Controller, in the office of the General Counsel of the United States Navy Department.

#### Chance Vought Names Burt, Factory Manager

Clifford E. Burt, assistant factory manager at Chance Vought Aircraft, has been appointed factory manager of the manufacturing department. He replaces Bertram D. Taliaferro, who retired April 30.

Burt, 45, brings to his job a broad experience in management and accounting. A native of Bartlett, Ohio, he started his business career in Parkersburg, West Virginia, with the Seward Wire Company. He was chief accountant and office manager of that organization when he left in 1934. From 1935 until 1942, he was associated with Lybrand, Ross Bros. and Montgomery, a nationally known public accounting firm.

Joining United Aircraft Corporation (of which Chance Vought is a division)

in 1942, Burt started out as a Pratt & Whitney Aircraft staff accountant. Shortly after, he became auditor for Pratt & Whitney's Kansas City subsidiary. In August, 1946, he was named assistant to the controller for United Aircraft and, in 1948, divisional accountant at Chance Vought.

Advanced to the post of assistant factory manager at Chance Vought on April 1, 1951, Burt remained in that position until his present promotion. He and his wife, the former Nellie Dailey of Parkersburg, West Virginia, live at 6336 Orchid Lane. They have three daughters.

#### U. S. Pipe & Foundry Elects Osborne, Vice President

The Board of Directors of United States Pipe and Foundry Company at their April meeting elected Fred Osborne a vicepresident. Mr. Osborne is a graduate of Clemson College and started with Sloss-



Fred Osborne

Sheffield Steel and Iron Company, Birmingham, Alabama in 1926.

Except for the period 1937-45, he was connected with the manufacturing end of the business in various capacities until his election as president and director of Sloss-Sheffield in April 1952. Last October when Sloss-Sheffield merged with U. S. Pipe he became president of the Sloss-Sheffield Division.

#### Adm. L. N. Moeller Retires To Join Palmer & Baker

Rear Admiral Lewis N. Moeller, Director of the Pacific and Alaskan Division, Bureau of Yards and Docks, U. S. N., is retiring at his own request after more than 35 years of Navy service to become associated with the Southern engineering firm of Palmer and Baker, Inc.

Regarded as one of the Navy's outstanding engineers, Admiral Moeller has recently been charged with the executive



Adm. L. N. Moeller

management of all Navy construction in the Pacific Ocean and Alaskan areas. San Francisco has been his headquarters.

A graduate of Columbia University's School of Engineering, Admiral Moeller has been a Navy engineer since 1918 when he was commissioned a lieutenant, j.g., on the basis of a nation-wide competitive examination. He has been associated with some of the Navy's most ambitious building projects in this country and throughout the Pacific. From 1935 to 1937, Admiral Moeller was Contact and Design Superintendent at Pearl Harbor. During World War II he served as Director of the Bureau of Yards and Docks' Progress. Control and Statistical Department in Washington. He has had charge of important projects at the naval air stations at both Pensacola, Florida, and Corpus Christi, Texas.

#### Hagan Names Harris To Post at Tullahoma, Tenn.

Samuel G. Harris has been named district engineer at Tullahoma, Tenn., for the Aeronautical and Special Products Division of Hagan Corporation, Pittsburgh, Pa.

Hagan is designing and building large instrument control facilities for the Air Force's giant new Arnold Engineering and Development Center at Tullahoma, and is engaged in similar projects at the Engine Test Laboratory at Wright-Patterson Air Force Base, the Navy's Aeronautical Engine Test Laboratory at Trenton, N. J., and the Willgoos Engine Test Facility of Pratt & Whitney Division, United Aircraft Corporation.

Following the outbreak of fighting in Korea, Mr. Harris was recalled to active duty as a captain in the Air Force, and assigned to the Power Plant Laboratory at Wright-Patterson Air Force Base. There he was engaged in administration of design and construction of facilities similar to that being installed in the engine test facilities at Tullahoma.

#### Birmingham Chamber Names Burch, Top Executive Officer

John O. Burch, formerly executive vice president of the Peoria, Ill., Association of Commerce, has accepted a similar post with the Birmingham, Ala., Chamber of Commerce.

He succeeds Hugh P. Bigler, who is resigning March 31, to take a position in private industry.

Mr. Burch is a native of Franklin, Ill., near Jacksonville, and holds degrees in the field of education from both Illinois college at Jacksonville and the University of Illinois.

For a number of years following his graduation, he held a series of administrative positions in the public schools, including two principalships at Springfield schools. He later served as an assistant supervisor of distributive education in the office of the state superintendent of schools.



J. O. Burch

Burch has been cited both locally and nationally for his outstanding job with the Peoria Association of Commerce. He has been instrumental in promoting legislation and civic improvements both at the local and state levels.

#### Mills Named President By Manchester Terminal

R. J. Mills, who has been with the Manchester Terminal Corporation, second largest privately-owned terminal at the Port of Houston, since its organization in 1926, has been elected president.

Mr. Mills, formerly vice president and treasurer of the corporation, succeeds the late R. D. Ernst.

The appointment of H. C. Hix as general manager in charge of consolidated operations of the wharf division and compress and warehouse division also was announced.

## **NEW PRODUCTS**

#### Portable Work Platform

Atias Industrial Corporation, 849—39th Street, Brooklyn 32, New York—The new Scaf-Fold.

This entirely new development in portable work platforms features removable gate-leg out-riggers with leveling screws.



Scaf-Fold

This is the first time that a work platform not only telescopes up and down, but also folds in and out. This Scaf-Fold is ideal for tight spots such as getting into and out of small elevators, doorways, etc. It comes in one piece, no erection required, no loose parts, it is safe, sturdy, yet easily rolled and easily raised.

#### Trim Board

Zeus, Inc., P. O. Box 177, Sausalito, California — A revolutionary new type of trim-board has been announced which combines safety and accuracy. The Roleut trim-board features a self-sharpening rotating wheel-blade which is enclosed in a protective cast-aluminum carriage. Blade is geared in a ratio to provide extreme ease and speed of operation. Entire carriage assembly travels on a solid I-Beam track and trims paper, acetates and similar sheet materials.

Many applications are possible with decrease in operational hazards and increase in speed of hand-work involved in the cutting of paper, films and other sheets. The Rolcut trim-board is said to be ideal for sheeting from rolls, shipping and wrapping rooms, and similar uses.

#### Cooler

Nor-Lake, Inc., Dept. KP, Hudson, Wis.

—Large capacity combined with design provisions for low vertical clearance are features of the Nor-Lake Lo Boy Dry Bottle Cooler.

Available in three sizes—both remote and self-contained—Nor-Lake Lo Boy models have capacities ranging from 16 to 30 cases. Construction features include adjustable bins, heavy gauge stainless steel top, a glass rail at the rear, disappearing doors and a baked enamel finish.

High velocity blowers and a heavy duty coil speed cooling by providing a continuous flow of cold air around the bottles.

All Lo Boy models are 35½ inches high to ensure easy fit behind bars, counters and wherever low vertical clearance is a requirement. Model length ranges from 48 to 92 inches in the remote units. Self-contained models are 22 inches longer. Depth on all units is 28 inches.

#### Controllers

The Bristol Company, Waterbury 20, Conn.—A new line of Free-Vane Electronic Pyrometer Controllers.

The new controllers actuate relays, electric contactors, solenoid valves and motor valves to provide close temperature control of a wide variety of furnaces, ovens, kilns, salt pots, plastic molding machines, and other heating equipment.

The Free-Vane Controllers feature a unique electronic control system based on the frequency modulation principle. a newly-developed millivoltmeter mechanism, and unit plug-in construction. The basic model can be used for low-open, high-open, and low-high control. A model with an additional plug-in unit makes possible proportional current input to provide practically straight-line control of many heating appliances. A double control unit model is offered to provide low-open-high or low-normal-high control. All models are available with thermocouple failsafe protection to protect the heating appliance in case of thermocouple burn-out or other failure. The controllers are made in a wide selection of temperature ranges from 0-400°F to 0-3000° F.

#### **Torches**

Weldit, Inc., 990 Oakman Blvd., Detroit 6, Mich. — Two new jet superheating torches. Designed to meet such applications as weed burning, asphalt road repair, railroad right-of-way maintenance, tar melting, preheating, thawing, bending, and descaling, these torches are fabricated of seamless steel tubing and built for rugged service.

The Weldit B-1 superheating torch is a light weight model, weighing 3 pounds, length, 404 inches. This torch operates from any standard propane tank at tank pressure. Fuel consumption, 15 pounds per hour. Produces 391,995 B.T.U. per hour.

The Weldit B-2 superheating torch, the heavy duty model, weighs 5½ pounds, length 46 inches. Operates on liquid gas by inverting tank or using tank equipped with dip tube. Consumes 23 pounds of

propane or butane per hour. Produces over 600,000 B.T.U. per hour.

#### Pressure Switch

Barksdale Valves, 1566 E. Slauson Ave., Los Angeles, California—Meletron Model 314 in six classes of proof pressures (to 500, 1500, 3000, 4500, 6000, and 12,000 P.S.-L.) They provide accurate sensing of system pressures over an adjustable range of 15 P.S.I. to 10,000 P.S.I. Suitable for liquid, gas, or water systems.

The switch will actuate at any predetermined pressure over the adjustable range; available withexternal adjustment if setting requires frequent changes. The variable actuation value ranges from 10 to 2,000 P.S.I. depending on the switch class. Actuation may be on increasing or decreasing pressure, automatically reset by snap action of switch.

#### Tape Dispenser

Air Fixtures, Inc., Dept. L., North Manchester, Ind.—Speed, accuracy and power characterize this automatic air-operated tape dispenser. Adjustable for various lengths and types of tape. Foot pedal control reduces dispensing time to zero and delivers tape automatically at the same position every time. Operator quickly learns to grasp tape without taking eyes from work, increasing production and improving quality of workmanship. The dispenser attaches to any factory air line.

#### Electric Furnace

The L & L Manufacturing Company, Chester 63, Pa.—A new line of 37 electric furnaces. Known as Dyna-Kiln Electric Furnaces, each model is heated by new



Dyna-Kiln

Dyna-Glow Elements resting in Dyna-Glow Element Holders (patent pending).

The new furnaces are available in 2050° F and 2300°F heat ranges. Despite 18 improvements in the 37 L & L electric furnaces, it was stated there are no price increases.

#### Cabinet Ovens

Grieve-Hendry Co., Inc., 1811-19 W. Lake Ave., Chicago 12, Ill.—A new line of Cabinet Ovens for closely controlled production and laboratory use.

New design and engineering make possible closer control of uniform temperature, better performance and greater economy of operation.

These Ovens are equipped with a high pressure motor driven blower which propels heated air in a definite air-flow pattern through the work chamber. This prevents any disturbance due to radiant heat and assures temperature uniformity.

Other features include: Indicating temperature control; high volume adjustable air-flow; high and low heat switch for close control and quick recovery; Inconel-sheathed heating elements; Manual interlock for purge period operation of blower without heat; electrical interlock for turn-off of heat in case of blower motor failure; adjustable, positive exhaust and intake.

#### Precision Pressure Switch

Simple Manufacturing Corp., Syracuse, N. Y.—A new type precision pressure switch.

The switch is suitable for use on water, air or hydraulic pressures. As "simple" as its tradename implies, this switch is an adaptation of the time-proven Bourdon Tube principle, with no wearable moving parts.

A spokesman for the firm states, "The trade will find the Simple switch fills a multitude of jobs, gives a combination of operating advantages that can't be equalled by any old-fashioned type pressure switch. Best of all, the Simple switch takes the place of a complete line, eliminating inventory and storage headaches." He further points out that shelf life does not harm the switch, because it is rust-proof, contains no rubber diaphragm to dry or crack.

#### Condensifilter

Hankison Corporation, Pittsburgh, Pa.

—The new Model A-100-D Condensifilter uses an entirely new type of disposable filter cartridge which provides even greater economy of operation.

Constructed of wire mesh and flannel cloth, the cartridge provides over twenty-four square feet of filtering area, an increase of 37 per cent over previous models. When the filter becomes dirty, the entire cartridge is quickly replaced by removing only one nut at the top of the Condensifilter. This new filter cartridge eliminates costly shut-downs and reduces maintenance to a matter of minutes instead of hours. Under normal working conditions, the unit will operate five to six months without renewing the filter.

The condensing unit is engineered to provide the maximum heat exchange area. More than 950 square inches of surface area cools the compressed air traveling through the condensing section. The NEW PRODUCTS

dewpoint of the air is lowered to within two or three degrees of the temperature of the cooling water used, and water and oil, in both entrained and vaporized states, are removed by condensation.

#### **Quick Release Valve**

**Deublin Co., Glenview, Ill.**—A quick-release valve guaranteed not to chatter.

Designed to handle air pressure from 0 to 250 p.s.i. on pneumatic clutches up to 1,500 horsepower, the Deublin valve introduces innovations in design and performance, it is stated.

According to the announcement, features include (a) light weight and compactness which permit its use on rotating elements without disturbing dynamic balance; (b) a built-in orifice which prevents accidental removal of orifice from the line and eliminates possibility of pressure equalization responsible for chatter; (c) double-piston design for smooth, positive, quick-releasing action; (d) distinctive construction eliminates the need for a spring.

#### Precision Balance

The Ohaus Scale Corporation, Union, New Jersey—A new type balance featuring a micrometer poise.

This unique poise enables the balance to be used for a range from 0.5 to 1,000 grams without additional weights. The poise is designed so that it may be slid along the beam for rapid traverse and rotated for final positioning. The poise barrel is calibrated in .5 gram increments which subdivide the 10 gram beam divisions. The balance is equipped with 7" diameter stainless steel plates and etched aluminum graduated beam.

The capacity is 5,000 gram, sensitivity 0.5 gram. As an additional feature, the balance has an undivided tare beam of 1 pound capacity. Self-aligning bearings are of agate and knife edges of precision hollow ground tool steel.

#### Write-On Labels

W. H. Brady Co., 727 W. Glendale Ave., Milwaukee 12, Wisc.—Numerous industrial identification problems can be solved with the new Self-Sticking Write-On Labels.

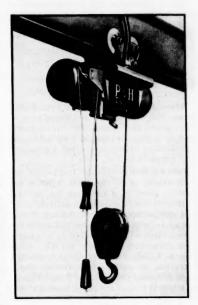
Brady Write-Ons combine a printed form and write-on space all on one quick-to-use label. The printed part of the label tells if the item is "Accepted," "Rejected" or "Overhauled" . . . whether to "return to Vendor," "Hold for Inspection" or "Rework." A different color background for each wording helps provide instant identification for quick classification. The write-on space has ample room for the authorizing person to write in necessary data with pen, pencil, ballpoint, rubber stamp or typewriter.

#### Lift Hoist

Harnischfeger Corporation, 4400 W National Ave., Milwaukee 46, Wisc.—A new model Zip-Lift Electric Hoist with rope control.

The new hoist is actually a standard Zip-Lift designed to be operated with P&H's unique "One-Hand" Rope Control. It has all the features of the regular model.

P&H stresses the fact that the new Zip-Lift is guaranteed to operate continuously during intermittent usage for a period 25 per cent longer than the rated time limit. The new hoist is also designed with a weight-overload safety factor of five times the rated capacity.



Zip-Lift

As in all P&H Hoists, wire rope hoisting will be used because of its wider range of side pull and greater safety from hidden wear. Other regular P&H features will be included such as double brakes, oil bath lubrication, fully-enclosed construction, and greased-packed motor bearings. The new Zip-Lift comes in two models with lifting capacities of 500 and 1,000 pounds. Hoisting rates are 25 and 13 feet per minute. Both models are available with 12-ft. and 18-ft. lift.

#### Steel Tape

Evans & Co., Elizabeth, N. J.—A new line of 25, 50, 75 and 100-foot premium steel tapes at approximately half the price previously charged for tapes of corresponding quality.

The tape itself is made of %-inch-wide high-carbon steel, hardened, tempered

(Continued on page 46)

## **NEW PRODUCTS**

(Continued from page 45)

and Bonderized. It is enameled in white and numbered in black. Markings indicate feet, inches, and eighths. Supplementary feet-markings are given every inch. When worn, blades can be replaced easily. At the end of the tape is a hookring combination for one man measurement at no extra charge.

Provided with the "White Tape" is a heavy gauge plastic carrying case which can be used for tape storage or as a utility box. In addition, each tape and carrying case comes in a reinforced cardboard carton. Included also with each tape is an instruction booklet containing helpful tape-rule and measuring information.

The tape case is of heavy leathergrained DuPont vinyl. A chrome-plated wind-up handle folds into the case when not in use. A double-roller mouth-piece facilitates winding and unwinding and minimizes tape wear.

#### Finish For Magnesium

Allied Research Products, Inc., Baltimore, Md. — Iridite #15 (Mag-Coat), a new protective finish for magnesium, added to Allied's Line of Iridite protective finishes for zinc, cadmium, aluminum and cuprous alloys.

Like all Iridite finishes, Iridite #15 for magnesium is a chromate conversion coating. That is, it converts the surface of treated magnesium to an entirely new, and chemically different, surface. Dark brown in color, the Iridite #15 finish on magnesium is best described as of a complex chromium-chromate nature. This film is highly resistant to atmospheric corrosion, as well as to corrosion from some chemical sources. The Iridite film is an integral part of the metal itself, rather than a superimposed film. Thus, it will not chip, flake or peel when bent. A slight dimensional change is caused by treatment with Iridite #15, the degree depending upon time of immersion.

The film is produced by simply immersing the parts in the Iridite solution. The solution operates at ordinary room temperatures and without the need for electric current. No special equipment is required. No specially trained operators.

#### Hot Spray Heater

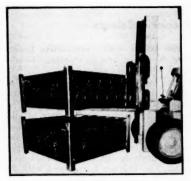
The Spee-Flo Company, 720 Polk Ave., Houston, Texas—The Circa-Flo-Pressurematic line of hot spray heaters.

The introduction last year of the Spee-Flo Industrial Heater offered for the first time an industrial hot spray device free from troublesome coils. It is generally known that the principle of hot spray has been well accepted everywhere. Now another outstanding contribution to this method is the new CIRCA-FLO-equipped PRESSUREMATIC line.

#### Parts Box

Morrison Steel Products, Inc., 601 Amherst St., Buffalo 7, N. Y.—The new Morrison all-steel Stak-Box is designed to provide a safe as well as a time, labor, and space-saving method for transporting and storing parts and material. Job operations can be expedited by moving inventoried quantities of parts in Stak-Boxes, with a crane, fork lift, boom truck, or dollies, Valuable cube space in industrial plants can now be utilized by storing parts and material in Stak-Boxes which can be stacked as high as space and your materials handling equipment permit.

Morrison Stak-Boxes are constructed of heavy, formed steel frames with sides and bottom of sheets of 9-gauge, unbattened, expanded steel. This gives maximum strength and load capacity with a relatively lightweight unit. These boxes are 50 inches square at the top, 49 inches square at the bottom, with a 24-inch over-



Stak-Box

all height. This tapered frame feature insures solid, positively safe stacking. Each Morrison Stak-Box will accommodate up to 7,000 pounds. Four equally spaced ¼-inch x 2-inch steel reinforcement bands are welded across the bottom for maximum strength and overall rigidity. Heavy hook plates at the four corners quickly lifting Stak-Boxes with a crane, provide a safe, convenient method for

#### Exhaust Head

The V. D. Anderson Co., Dept. EH, 1935 W. 96th St., Cleveland 2, Ohio—A new exhaust head for industrial stacks to clean up exhaust steam and vapors discharged to the atmosphere. This unit effectively cleans up the vapor so that no nuisance particles such as troublesome oil and process liquors are vented which attack machinery, nearby buildings and/or create a public nuisance.

This exhaust head has no moving parts or filters and as a result it is virtually maintenance free with nothing to wear

out, and nothing to clog up. The entrainment laden vapor entering the purifier is engaged by a stationary centrifugal element which imparts a carefully controlled but extremely rapid rotational motion to the vapor. This action guides all dirt particles, guck, oil and water outward to the walls of the purifier. Here it is drained to and ejected out the drain. The clean, dry steam continues upward and is discharged to the atmosphere. The unit is guaranteed 99% effective and the manufacturer states the greater the velocity through the unit the greater the operating efficiency.

#### Cleaning Cloth

Carol Chemical Products Corp., 268 E. 45th St., Brooklyn 3, N. Y.—A new antifog and lens cleaning cloth has been developed, for use on glass or plastic surfaces, to prevent the formation of fog or steam on eye-glasses, windshields, windows, mirrors, etc., caused by body heat, humidity or temperature changes.

By simply wiping the surface to be treated with the impregnated No-Mist cloth, the object is both cleaned and fog-proofed in one quick, easy operation—eliminates the need of liquids, tissues or cabinets.

Packed in handy individual plastic bags, No-Mist cloth can be carried in the pocket and is instantly available.

#### Chemical Plant Motors

The Industrial Motor Division of Robbins & Myers, Inc., Springfield, Ohio—A new line of chemical plant motors in ratings from one to 40 horsepower, in NEMA frames up to 405. The new motors will be available in totally-enclosed and Underwriters' Approved explosion-proof construction.

Special Class "A" chemical insulation treatments permit the use of the new motors in applications involving acids, alkalis, dyeing and bleaching, canning and packing, and peroxide.

#### Portable Air Compressor

O. K. Clutch and Machinery Co., Florence St., Columbia, Pa.—A 75 c.f.m. portable air compressor for standby service or direct production jobs.

This new model, to be known as the Hornet "75," is designed for low cost production in O.K.'s modern plant and will handle the same work as the company's present 85 c.f.m. model, and approximately twice as much work as the company's present 60 c.f.m. model.

"We have developed this new singlestage gasoline-powered compressor because of the need for a medium size compressor that can be handled by one man, and that is most economical to build and economical to operate," Howard Sparler, president of O.K. Clutch, said in announcing the new model. "Our field tests have shown that this new model will handle many jobs efficiently and economically."

# "What will the telephone be like when I grow up?"



#### Big New Industrial Plants Begin Operation in N. C.

Production has begun in two large new North Carolina industries—the \$40,000,-000 duPont dacron plant near Kinston and the \$10,000,000 American Thread plant near Marion in the Blue Ridge foothills.

As the first dacron began coming from the duPont plant in eastern North Carolina, announcement was made that duPont had licensed the American Enka Corporation to manufacture nylon, and that Enka would erect a \$2,000,000 nylon plant adjacent to its rayon establishment just west of Asheville on U. S. Highway 19. Production is scheduled for early 1954.

Meanwhile, in eastern North Carolina, construction of the \$125,000 zipper plant of Talon, Inc., began. This plant is being built on a 10-acre site and is one of three established in North Carolina by Talon, the others being at Belmont and Stanley in the Piedmont section.

Construction is also going ahead on new machinery and electronics industries. Babcock and Wilcox began its \$2,000,000 industrial boiler plant in Wilmington with expectation of beginning production by mid-summer. Walls of the \$4,000,000 Western Electric plant at Winston-Salem and the \$2,000,000 Cornell Dubilier electronics plant at Sanford are well above ground, and the foundation is being completed for the \$12,000,000 Westinghouse Electric plant in Raleigh. Machinery from Switzerland is being installed in the \$6,-000,000 Oerlikon Tools and Arms Corporation plant near Asheville. In Asheville. also, the International Resistance Company is beginning production of electronic resistors in a new \$350,000 plant.

In Greensboro, 50-year-old Wysong and Miles Co. delivered in March what is believed to be the largest machine tool

ever produced in the South—a power squaring shear weighing over 10 tons. It was made for the Carolina Steel and Iron Co., also of Greensboro.

Announcements were made of launching three new furniture plants: Skandia Furniture Co. with a 30,000 square foot bedroom furiture plant in Statesville, Lawing Manufacturing Co. with a 30,000 square foot novelty furniture plant in Maiden, and Peninsula Manufacturing Co. which revealed plans for establishing a southern branch of its Grand Rapids, Mich., school furniture business in either Lenoir or Hickory. Wood Conversion Co. of St. Paul, Minn., is constructing a southern plant at High Point at cost of \$50,000.

In Waynesville, the Wellco Shoe Co. completed a 6,000 square foot addition to its sponge rubber shoe plant, and in High Point the Fox Paper Company, with home office in Lockland, Ohio, began doubling the facilities it opened in 1952 to make paddings for the furniture industry. When completed the High Point plant will have 26,400 square feet.

High Point also landed a new hosiery mill, Kayby Hosiery Mill of North Carolina, Inc., which will manufacture hosiery in connection with the Trimfoot organization of Philadelphia. Other textile developments so far this year include: increase of 30 per cent capacity by expansion of the Greenville Mills, Inc., subsidiary of the Artloom Carpet Co. in Greenville; doubling capacity of Linn Mills Co. at Landis with addition costing \$500,000, including machinery; \$40,000 addition to Clyde Fabrics, Inc., of Newton; \$100,000 addition to Paola Cotton Mills, Inc., of Statesville; \$100,000 addition to Burlington Mills unit at Reids-

New garment plants are being located in Dunn, Hamlet, Rich Square and Tabor City.

Significant public utilities developments include the green light given by the U. S. Supreme Court to the Virginia Electric & Power Co. for construction of the \$30,000,000 power dam across the Roanoke River at Roanoke Rapids, and announcement by the Southern Bell Telephone Co. of plans for \$5,000,000 expansion of its facilities in Charlotte.

Ethyl Dow Corp. leased space at the Morehead City Port Terminal for chemical storage tanks.

#### National Container Opening Converting Plant at Memphis

National Container Corporation, one of the country's largest integrated manufacturers of kraft corrugated shipping containers, announced April 23 that it will open a converting plant at Memphis, Tenn.

According to Samuel Kipnis, president of National Container, the new Memphis converting plant will be in operation producing shipping containers within sixty days. It will be located at Provine and Neptune Streets.

A. Lee Gordon, Jr., who has been manager of National Container's Memphis sales office, was appointed general manager of the entire Memphis operation.

A. Arthur Halle, Jr., will serve as sales manager.

"National Container has watched the industrial growth of the Memphis and mid-south area with great interest," Mr. Kipnis said. "The Memphis converting plant will render important and much needed service to the industry in the locality."

The new converting plant will be the company's sixteenth in a coast-to-coast chain. In addition, National Container operates five kraft board, pulp and paper mills and is now building a giant \$25,000,000 mill near Valdosta, Georgia.

Mr. Kipnis said the Memphis plant will employ the most modern automatic box-making equipment in the country. "National Container will be the only fully-integrated producer of kraft corrugated shipping containers, with facilities 'from the tree to the finished product,' which has a local manufacturing plant," he added.

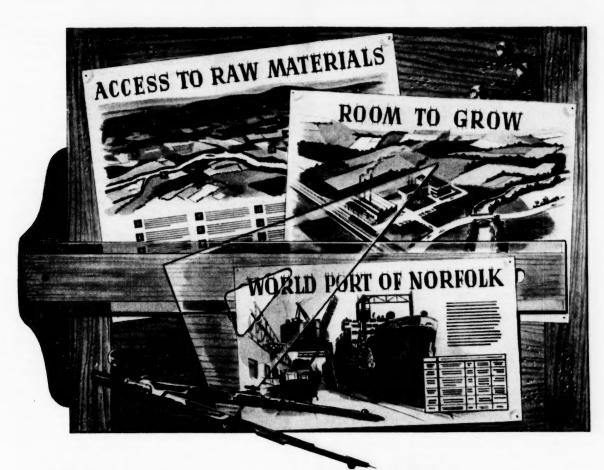
#### Abbott Worsted Builds Plant in South Carolina

The Abbott Worsted Company of Graniteville, Mass., has let contract to the Daniel Construction Company of Greenville, South Carolina and Birmingham, Alabama for a new worsted yarn mill to be located at Seneca, South Carolina.

This 85,000 square foot, one-story plant will be totally enclosed and air conditioned, finished in glazed tile throughout. Fiber glass insulation is laid over a precast concrete roof placed on barjoist framing.



"Just how much do tradition and slagars mean to you?"...



## from any angle ... the *Land of Plenty\** is a good place to locate your *NEW PLANT!*

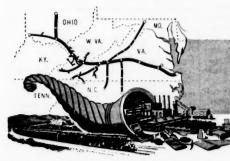
Dollar-wise industries have to look at each and every angle before they can spot THE best spot for their new plant. Look into the Land of Plenty . . . use any yardstick . . . investigate any angle. We believe you'll find . . . as many other industries have . . . a site that BEST suits your exacting requirements.

Vast reserves of raw materials right at hand . . . ample electric power . . . industrial water, both

surface and underground . . . good labor supply . . . fair taxes . . . plus speedy, dependable rail transportation service to and from domestic and world markets — all are angles you can't overlook. They're yours . . . in the Land of Plenty!

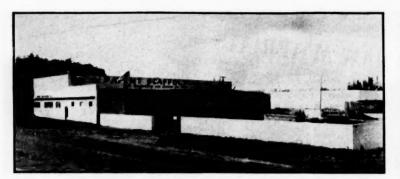
From every angle you'll find that this great and growing six-state area has the right combination for successful operations of many types of industries.

For complete details on plant locations that will best fit your manufacturing requirements, write the Industrial and Agricultural Department, Drawer MR-609, Norfolk and Western Railway, Roanoke, Va.



Norpolkam Western

\*THE SIX GREAT STATES SERVED BY THE NORFOLK AND WESTERN— VIRGINIA • WEST VIRGINIA • OHIO NORTH CAROLINA • KENTUCKY • MARYLAND



The Patent Scaffolding Co., Inc., manufacturers and distributors of all types of steel and aluminum scaffolds, has moved into its new branch at 7140 North Miami, Fla. The property provides 1,500 square feet of office space, 11,000 square feet of covered storage and 15,000 square feet of open storage. John B. Orr, Inc., Miami, was the general contractor, and L. B. Taylor the Architect-Engineer.

## Dixie Guano Expanding Facilities at Laurinburg, S. C.

In a major expansion step designed to step up production sharply and to facilitate deliveries during rush periods, the Dixie Guano Company, Inc., rapidlygrowing manufacturer of fertilizers, has under construction a fully-automatic 39,000-square-foot addition to its present plant at Laurinburg, N. C.

The addition, measuring 150 x 260 feet, will be a standardized steel-frame structure produced by the Luria Engineering Company at its fabricating plant in Bethlehem, Pa. As a result of the automatic facilities to be installed at the plant, only one man will be required during seasonal lulls to fill the entire bulk storage area with 12,000 tons of bulk mixed fertilizer. This will enable the concern to have a substantial inventory ready for processing and packaging when orders reach their peak during the Spring planting period.

The multi-span rigid steel framework, weighing 224 tons, with its corrugated asbestos-cement cover, has been designed and fabricated by the Luria Engineering Company. The Southeastern Construction Company of Charlotte, N. C., did the ground clearance, excavation and foundation work. The field erection of the structural steel and application of cover are being handled by E. W. Hurst Company of Atlanta, Ga.

Plans call for completion of construction by June and for occupancy next October.

#### Dow Chemical To Build Polyethylene Plant in Texas

The Dow Chemical Company is entering the production of polyethylene, C. Benson Branch, Manager of the Plastics Department, announced recently. Negotiations for patent licenses and technical knowledge have been made with Imperial Chemical Industries Limited, British firm, according to the announcement.

Dow's Texas Division at Freeport, Texas, will construct plant facilities and expects to start production of this plastic in 18 to 24 months.

Polyethylene is one of the newest and fastest growing of the plastics. Among major uses is film for a wide variety of packaging purposes—refrigerator food storage bags, shower curtains and drapery materials.

It is also used for many injectionmolded articles—housewares, such as refrigerator food storage dishes, mixing bowls and storage trays. Other important uses include paper coating, plastic pipe, wire and cable coating.

#### Paper Mill Expansion Completed For Halifax Paper

Expansion of the Halifax Paper Company's Roanoke Rapids plant in North Carolina has been completed, according to the engineer-constructor, The Rust Engineering Company of Pittsburgh and Birmingham, Ala. Cost of the project was \$5,800.000.

The new addition augments the plant's existing facilities for the production of unbleached kraft paper. The project included construction of a two-story building to house a new 246-inch paper machine and its necessary stock preparation equipment, as well as additional finishing and shipping facilities, a high density pulp storage tower, and a 6,000,000-gals.-perday water treatment plant.

The mill's new 246-inch Fourdrinier paper machine can operate up to speeds of 2,500 feet per minute. Its forming wire is 130 feet long. The machine comprises 33 paper driers, two felt driers (60 inches in diameter; able to withstand 125 psi pressure), latest type press section, pressure type head box, a six-roll calendar stack, breaker stack, Beloit mechanical sectional drive, mechanical reel puller, and a Jamar Olmen ventilating system.

Necessary alterations were also made to the existing paper mill in order to integrate its production with the new ad-

dition. The new building was designed to permit installation of a second large paper machine at a later time in the most economical way without interrupting or slowing down mill operations.

In the past this plant at Roanoke Rapids has had a number of "firsts" notable to the pulp and paper industry, since it was the first sodium sulphate mill in the United States, and the first mill to use Southern Pine by the new sodium sulphate process. It was also the first mill to use tumbling digesters, and the first to provide diffusers for washing the Southern Pine pulp. Further, its 104-inch paper machine was the first to make kraft paper from the Southern Pine pulp.

#### Enka To Build Plant For Manufacture of Nylon

American Enka Corporation announced last month that it had signed an agreement with the DuPont Company, licensing Enka to manufacture nylon under DuPont patents.

J. E. Bassill, president of American Enka, said that construction would be started immediately on a plant adjacent to the company's rayon factory at Enka, North Carolina.

"The construction of the North Carolina plant is an initial step in the company's program for entering the newer synthetic fiber field," Mr. Bassill stated. "American Enka's initial production will be entirely staple, but facilities will be provided for the later manufacture of the filament type of yarn as well. It is expected that the new plant will be in production early in 1954."

American Enka is one of the major producers of high tenacity rayon for tires, as well as rayon textile yarn. The company has been conducting research in synthetic polymers for some time past in cooperation with an affiliated organization, Algemene Kunstzijde Unie, N.V. of Arnhem, Holland. The Dutch organization manufactures nylon yarn from caprolactam at a plant located at Emmen, Holland. Although American Enka will be licensed under DuPont patents, it will utilize technical know-how and experience of its Dutch affiliate.

Initial production at the new plant will be at the rate of two million pounds of staple a year. The cost of constructing the new facilities is estimated at \$2,000,-000 but the company explained that this represents only the initial step in its contemplated expansion program.

#### Kenmar Plans Factory For Tyler, Texas

The Kenmar Manufacturing Company, makers of upholstered living room furniture, will locate a factory at Tyler, Texas, in 1953 employing 125 persons, the Chamber of Commerce and Robert A. Maurer, vice-president of Kenmar, have announced.

#### Southern Research Inst. Holds Second Annual Conference

Research, what it means and some of its potentialities in a highly competitive economy, was discussed for a group of business men at the Southern Research Institute, Birmingham, May 15.

"New Technical Horizons" was the general subject for the second annual conference, called specifically because of the interest created by the first, held in Birmingham a year ago.

Following the pattern which developed such widespread interest and response to last year's conference, the May discussion was strictly one for business men, rather than technical.

It brought to the group four distinguished speakers who dealt with subjects of particular interest and value to business executives.

The program opened at 9:45 a.m. with welcome and introductory remarks by Thomas W. Martin, chairman of the institute.

Ferdinand Eberstadt, president, F. Eberstadt & Co., Inc., discussed "Financing the Products of Research." Mr. Eberstadt, head of a widely known investment securities house, a director of many major corporations and during World War II, chairman of the Army and Navy Munitions Board, is a graduate of Princeton and received the LL.B. degree from Columbia University.

The speaker suggested means of financing advances in technology which inevitably create new wealth.

Another subject of widespread public interest, "Tomorrow's Metal Today—Titanium," was discussed by Thomas W. Lippert, manager of sales and technical services, Titanium Metals Corporation of America.

Mr. Lippert is a graduate of Carnegie Institute of Technology where he also was an instructor in physics, later joining the staff of Iron Age, nationally known New York trade publication. He resigned from Iron Age in 1949 to become manager of all publishing activities of the American Institute of Mining & Metallurgical Engineers, and is considered an authority on the general subject of metals.

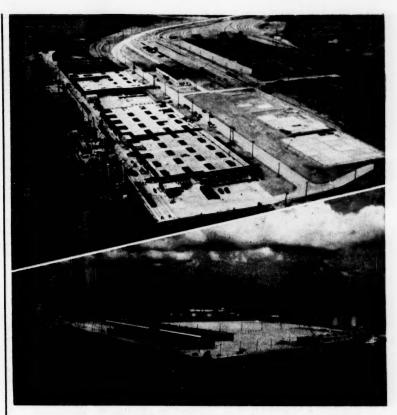
Titanium, familiarly known as "The metal of tomorrow," is less than twice as heavy as aluminum and three times as strong.

The discussion was resumed at 2 p. m. after a luncheon at Mountain Brook Club when Hugh D. Hughes, General sales manager, industrial chemicals division, Carbide & Carbons Chemicals Co., discussed "Petrochemicals and Coal Hydrogenation."

Mr. Hughes has had a distinguished career in his chosen field, having started as a chemist in the process development department of DuPont Fiber Silk Co., now the rayon division of the DuPont Co.

His talk was illustrated by slides and a motion picture in sound and color.

Closing the meeting was a discussion at 3 p. m. by Frank J. Soday, director of research, the Chemstrand Corp., on "Synthetic Fiber Developments."



## ...TWO IF BY SEA

Two new ports—Wilmington and Morehead City—serve North Carolina industry with low-cost water transportation. They will bring the markets of the world closer to plant locations enjoying the many advantages of ACCESSIBLE ISOLATION.

Along the same historic coast industrial personnel can enjoy the many recreational facilities that are a part of North Carolina's own VARIETY VACATIONLAND.

For a list of available sites and industrial buildings and other detailed information, communicate with Department of Conservation and Development, Raleigh,



## The Dock

(Continued from page 33)

When the jacks have done their job the wells are capped with steel plates boited to the deck across the top of the caisson, holding the hull sturdily on the caissons. After erection the jacks may be left permanently in place or stored,

Casting off for a new location takes only a few hours. Cap plates are removed, and the jacking operation is reversed, allowing the dock to descend the caissons to water level, the caissons are pulled out and loaded adeck and it is ready to sail.

The dock section will have from six to two dozen or more caissons, depending on its size. The six new Consolidated Western units will have 22 apiece. They are pinned to bedrock in one of several ways, according to field conditions. The most common is to drill a hole into the rock and insert heavy steel angles, then pour six feet or so of concrete into the bottom of the tube around the pins.

For military campaigns such as the island-hopping tactics in the Pacific in the last war the barges offer vast possibilities. Hardy as permanent installations, they eliminate the construction of conventional docks, a substantial military cost item. When the theater of operations shifts they can readily be picked up and whisked to the next vital spot. Equally significant, militarily speaking, the structures provide superior wharf facilities where no harbor exists, unusually heavy tides make shoreline installations impracticable or coral reefs or sandy shoals prohibit ships from getting in close enough to discharge troops and supplies. The dock can be anchored hundreds of yards offshore, away from reefs and above restless tides, and linked to the mainland with a loading tramway supported by piers set on similar sections of a smaller version over which men and materials can be shuttled to the

On the offshore drilling side, extensive testing in the Gulf has convinced De-Long engineers they have come up with the best answer yet devised to the problem of mebility, the byword in drilling operations and a major bottleneck to cutting costs of expensive tideland operations. The backbreaking job of jumping a drilling barge and its tons of equipment from one location to the next is accomplished by the new dock barge as smoothly as it moves from one seaport docksite to another. J. H. DeLong. assistant vice president and manager of sales for Consolidated Western's Texas district, lends strong backing to the engineers by pointing to the increasingly watchful eye the oil industry is giving the model and the number of inquiries reaching the U.S. Steel plant at Orange. Future schedules there are being set up with a view to large scale production of the barge for offshore drilling, which gives every promise of becoming its largest market in the Southwest, he said.

Keeping the basic caisson-and-air jack principle, the barge lends itself to fabrication to any size and dimension to serve a driller's particular requirements. Too, since loads on a drilling barge are not as extreme as on a harbor dock much of the interior ribbing can be eliminated, yet leave a structure far stronger than required by the heaviest drilling load. Most of the hull's roomy interior thus can be utilized, saving premium deck space.

Looking at the commercial front, companies with important operations in foreign countries have indicated the unit will become a replacement for the ailing, inadequate wharves found in many overseas ports in which they operate. And at home, the dock may become a familiar fixture in American harbors, judging from the attention it is receiving from many port officials who are directing inquiries to Consolidated Western and to DeLong.

#### General Chemical To Expand Baton Rouge, La. Works

General Chemical Division, Allied Chemical & Dye Corporation, has announced plans to make two more important additions to its Baton Rouge, Louisiana, Works with the erection of large new plants for production of Sulfuric Acid and Trifluorochloroethylene, an important new organic fluorine chemical used by the plastics industry.

These new facilities mark the company's seventh major expansion at Baton Rouge Works since 1945 when General Chemical first erected an Anhydrous Hydrofluoric Acid plant there to meet wartime demands for this chemical in the manufacture of aviation gasoline. Since then, the Works has become one of General Chemical's principal producing locations serving the rapidly growing industrial South.

The new sulfuric plant is scheduled for operation by the end of 1953 and its output will be used to supply General's own increased chemical production demands at Baton Rouge and other Southern Works, as well as those of major industrial consumers in the Gulf State area.

The Trifluorochloroethylene plant will utilize a new process developed by General Chemical's research and engineering departments. It will become part of General's other extensive facilities erected at Baton Rouge Works in the past few years for production of organic fluorine compounds, including the company's line of "Genetron" refrigerants, aerosol propellants, and industrial chemicals.

Principal use of Trifluorochloroethylene is as a monomer, or base material, for manufacture of a special group of industrially important plastics of high fluorine content, which are characterized by their extreme chemical resistance and high thermal stability. General Chemical will market the product under the trade-name, "Genetron" 265.

The construction contract for both plants has been given to the Ralph M. Parsons Company of Los Angeles.

#### Koehring-Southern Holds Open House at Chattanooga

To celebrate the opening of its new manufacturing plant at Chattanooga, Tennessee, the Koehring Southern Company held a 6-day open house, April 17th through April 22nd at Chattanooga. Each day was devoted to a special group of guests. These included local civic and industrial groups, publishers, employees and general public, equipment users, and Koehring products distributors.

On hand, as hosts for the event, were some 30 officers, directors, and members of the sales organization from the parent Koehring Company of Milwaukee, Wisconsin, and its other subsidiary companies: C. S. Johnson Co., of Champaign, Ill.; Kwik-Mix Company of Port Washington, Wis.; and Parsons Company of Newton, Iowa.

Program included guided tours through the modern 800 x 120 foot factory, located on Manufacturers Road in North Chattanooga. A special equipment exhibit at the plant consisted of approximately \$220,000 worth of Koehring and subsidiary products, brought to Chattanooga especially for the occasion.

Visitors also received a preview showing of two new models of Koehring shovels and cranes, built at the Chattanooga plant. Company officials report that this represents the first excavator line manufactured in the South by Koehring.

To kick off the 6-day program, Koehring Southern Company held a special reception and dinner on Friday, April 17th, for local public officials, civic, business and industrial leaders, and for publishers and special representatives of the technical trade press. Chattanooga's Mayor P. R. Olgiati, officially welcomed Koehring Southern Company to the community. In his response, J. R. Steelman, Koehring President said. "By your interest and your presence, you assure us that we are part of your community. Your visit today to our plant and meeting with us this evening is heart-warming assurance of your acceptance of us." To the representatives of the trade press, he said, "Your interest is an encouraging measure of the significance of this event to our industry.'

Saturday, April 18th, was "family day." Koehring Southern put out the welcome mat for the families and friends of its plant workers, and for the general public, who turned out in enthusiastic crowds to tour the plant.

On the next day, April 19th, Koehring Southern received a special group of contractors and other users of construction and material-handling equipment from the Southeast.

Monday and Tuesday, April 20th and 21st, were set aside as combination open house and sales meeting for Koehring products distributors, and was attended by approximately 175 men who came in from California to Mexico, and from California to Maine.

County commissioners from Georgia were given an individual reception on Wednesday, April 22nd, the final day of the Chattanooga open-house celebration.

## Jantzen Chooses Seneca, S. C. For New Manufacturing Plant

A world famous manufacturer of swim suits—Jantzen—has chosen Seneca, S. C., for the site of a large new manufacturing plant, L. W. Bishop, Director of the State Research, Planning and Development Board, announced recently.

He said Paul DeKoning, Vice President and General Manager of the Jantzen company, had notified him a site has been purchased and construction will start this summer, with production to begin before the end of the year.

Plans call for an initial building of 30,000 square feet and the employment of 200 to 250 people, with an eventual expansion to 90,000 square feet employing approximately 600 persons.

In making the announcement, Mr. De-Koning was high in his praise of the people of South Carolina and the cooperation given Jantzen in the search for a location.

"Our site at Seneca, in the western part of the state, is conveniently located for both rail and highway transportation to all corners of the country," Mr. De-Koning said. "We are close to our prime sources of fabric, and in turn we will be closer to many of the large stores throughout the middle west, east, and south who sell Jantzen merchandise.

"We also found that employees nearby and available to the new operation are of the high type necessary to the care and workmanship which must be put into fashion apparel. There is adequate and good housing in pleasant surroundings for the new supervisory employees whom we will have to bring from Portland and other Jantzen plants. In all, we have never been more enthusiastic about the possibilities and the future for a new manufacturing operation," Mr. DeKoning added.

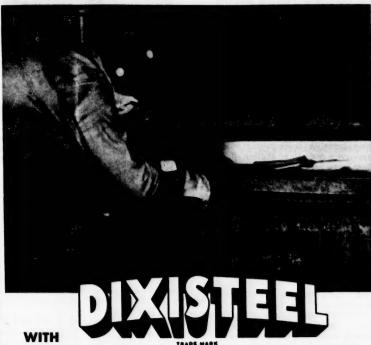
#### International Minerals Announces Feldspar Expansion

Construction on new feldspar grinding facilities at Erwin, Tenn., which will increase capacity for finely ground F-4 pottery grade flotation feldspar by about 50 per cent, was announced April 10 by Norman J. Dunbeck, vice president in charge of the Industrial Minerals Division of International Minerals & Chemical Corporation.

At the same time Mr. Dunbeck announced that a new mica mill also has been put into production at Erwin. The mill, which will supply a growing market for finely ground mica in the rubber and paint industry, will be operated under the Newdale Mica Company, a unit in the Industrial Minerals Division's Consolidated Feldspar Department.

The Erwin plants are two of 15 operated by Consolidated Feldspar Department of the Industrial Minerals Division of International Minerals & Chemical Corporation in an area extending from Arizona to Maine, and from North Carolina to Quebec.

### MAKE BETTER PRODUCTS AT LESS COST...



## FORGINGS AND STAMPINGS

MADE TO YOUR SPECIFICATIONS

Many manufacturers have increased their production and are making better products at less cost with tough, rugged DIXISTEEL Forgings and Stampings.

Produced from our own special analysis steel, DIXISTEEL Forgings and Stampings give positive assurance of correct chemical and physical properties.

Blanked and formed parts are produced on modern presses, with capacity up to 250 tons, including a four-slide machine. Closed-die forgings up to 20 pounds are made on modern drop hammers.

It will pay you to look into the full facilities of our Fabricating Division. We'll be happy to discuss them with you. Just write us or call collect today.

UPSETTING · THREADING · PUNCHING · HOT-BENDING · HEAT-TREATING DESCALING · HOT-DIP GALVANIZING · FABRICATED REINFORCING BARS

FABRICATING DIVISION

Atlantic Steel Company

ATLANTA, GEORGIA - EMERSON 3441

#### Westinghouse Air Brake To Purchase Failing Supply

Westinghouse Air Brake Company has signed an agreement to purchase the George E. Failing Supply Company, world's largest producer of portable drilling rigs for oil, water and mineral exploration, Edward O. Boshell, Chairman of the Board and President of Westinghouse, and George E. Failing, President of the Failing Company, announced recently.

Failing, which has its headquarters in Enid, Oklahoma, manufactures rotary type portable truck-mounted shot-hole rigs; core drill rigs; shallow production rigs; large hole irrigation rigs; blast hole rigs; uranium mining rigs; and a variety of attachments and supplies. The Company also purchases and markets additional oil field supplies. Failing accounts for at least 65% of the industry's production.

Discussing the action, Mr. Boshell stated:

"Acquisition of the George E. Failing Supply Company will mark another important step in Westinghouse Air Brake's long-range program of expansion and diversification.

"Le Roi Company, a Westinghouse Air Brake subsidiary, is now a major supplier of internal combustion engines and air compressors to the petroleum industry. The purchase of Failing will increase our range of products in this field."

Failing will be operated as the George E. Failing Company, a subsidiary of Westinghouse Air Brake. No change in personnel is contemplated, and Mr. Failing will serve as President of the new company.

Failing, which was organized in 1931, reported sales of \$6,297,216 for the fiscal year ended July 31, 1952, compared with \$4,687,910 in the preceding year. At the present time, the Company has a backlog of orders of approximately \$2,000.000.

Although no definite program has been formulated, Mr. Boshell said, Westinghouse Air Brake plans to expand operations of Failing to meet the ever-increasing demand for that company's products.

Before World War II, most of the Com-



Typical of the equipment made by the Failing Company is the portable rig pictured above.

pany's production went to the petroleum industry. Today, approximately 50% of its volume is derived from sources other than this industry.

In addition to its uses in the oil field, Failing rigs are used for drilling water wells for domestic use, air conditioning and irrigation, and in coring various formations in the worldwide search for uranium and other minerals.

#### American Bosch To Build Plant at Columbus, Miss.

Announcement has been made by the American Bosch Corp. that it plans to build a \$2,000,000 automotive electrical parts plant at Columbus, Miss. Donald P. Hess, president of the firm, said that the new plant will employ between 500 and 800 people with an annual payroll of more than \$1,000,000.

Business interests of Columbus contributed \$67,040 for purchase of the site and utilities for the building which the company is financing. Construction will start as soon as the architect's plans are

completed. The Mississippi Agricultural and Industrial Board began negotiations for the plant last October and Columbus was selected over about 10 other Southern cities.

The plant will be erected on a 50-acre site east of Columbus, adjacent to highway 82.

#### Koppers Dedicates Williams Plant

Confidence in the future expansion of Koppers Company, Inc., at the site of its new Williams Plant near Port Arthur, Tex., was expressed on April 29 to more than 150 local business and civic leaders by Dan M. Rugg, Vice President and General Manager of the Company's Chemical Division.

Occasion for the forecast of growth in chemical production was the informal dedication program for the Williams plant consisting of a luncheon at the Avalon Cafe in Port Arthur followed by a tour of the plant by the guests. Special buses transported guests from the luncheon to the plant site where guides explained operations to small groups of the visitors on a conducted tour of the installation.

In addition to Mr. Rugg's remarks, the luncheon program featured brief talks by W. F. Munnikhuysen, Koppers Executive Vice President, and J. P. Williams, Jr., a member of Koppers Board of Directors and Consultant for whom the new plant is named. Mr. Williams was President of the company from 1939 to 1946 and Chairman of the Board from 1944 to 1950, serving in a dual capacity for a two-year period.

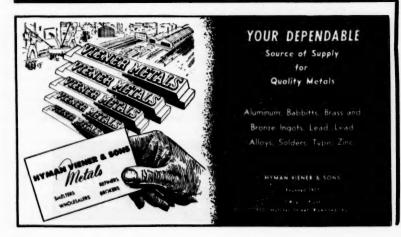
H. E. Roche, Williams Plant Manager, introduced the speakers and expressed the company's gratitude for cooperation extended by all segments of the community to Port Arthur's new industry.

Among the guests from Koppers Pittsburgh, Pa., headquarters attending the dedication were George M. Walker, Vice President and Manager of the Project Section of the Chemical Division; Carl H. Pottenger, Assistant Vice President and Sales Manager of the Chemical Division; George W. Hooker, Chief of the Project Section of the Chemical Division: General T. M. Osborne, Manager of the Chemical Engineering Department of Koppers Engineering and Construction Division; T. H. Hamilton of the company's Law Department; Ralph Winslow, Manager of Koppers Public Relations Department, and George Van Gundy, Associate Manager of the Public Relations Department.

Referring to the 1040-acre plot purchased by Koppers two years ago and the fact that the first unit of the Williams Plant occupies only a small portion of the site, Mr. Rugg explained that "There's no secret about it."

"We believe that this area holds great promise. We want to grow here. I think I can safely say that we will grow here."

"... I do not necessarily mean that we will do so at once... Right now we are in a period of consolidating our gains. But we have no intention of ceasing our growth for long. And certainly, Port Arthur is a most inviting location for future expansion."



## WHO'S WHERE

Wayne Murray, traffic representative for the Frisco Railway at Springfield, Mo., has been named general agent at Miami, Fla. He succeeds Gus O. Strebeck who was recently named general agent at New Orleans.

Murray has been with Frisco since July 1938. He started as a trucker of the freight platform at Springfield and in October, 1938, was promoted to merchandise agent. He has been traffic representative at Springfield since 1940.

. . .

The Seaboard Air Line Railroad Co. has announced the following appointments: Mr. C. E. Bell, vice president, will have charge of public relations with headquarters at Norfolk, Va. Mr. J. R. Getty, general passenger traffic manager, with headquarters at Norfolk, Va., will have jurisdiction over passenger traffic matters heretofore handled by Mr. Bell.

Mr. R. L. Progner has been appointed general passenger agent, Tampa, Fla. with offices in the Hillsboro Hotel Building, vice president Mr. R. E. Blumenstiel, transferred.

Mr. W. H. Gray, general baggage agent, is promoted to other duties in the general office. Mr. W. B. Paul is promoted to position of baggage agent and will handle all such matters over the name of J. D. Makinson.

Mr. E. F. Waldrop, Jr., is promoted to assistant general passenger traffic manager, Norfolk. Mr. A. C Rea is promoted to general passenger agent, Norfolk. Positions heretofore held by these men are abolished.

The Atlantic Coast Line Railroad Co., has announced the following appointments: Mr. J. T. Clark, commercial agent, Lakeland, Fla.; Mr. R. F. Hart, commercial agent, St. Louis, Mo.; Mr. J. H. Fryar, Jr., freight service agent, Cincinnati, Ohio; Mr. J. R. McLendon, general agent, Raleigh, N. C.; Mr. R. M Mock, commercial agent, Wilson, N C.; Mr. W. W. Hocutt, commercial agent, Fayetteville, N. C.; Mr. C. D. Hastings, freight service agent, Wilson, N. C. . .

Arthur S White, field representative of the fiber glass division of Libby-Owens-Ford Glass Co. in the Chicago area, has been assigned to the large St. Louis industrial area, succeeding Mark Joseph Wells. Mr. White will have his office at 411 N. Seventh St., St. Louis, at the Libby-Owens-Ford offices.

W. A. Kratzert, Florida Assistant State Highway Engineer, has joined Universal Concrete Pipe Co. as state engineer representative. He will serve the network of Universal plants and offices in Florida, which includes Miami (Dania), St. Petersburg, Tampa, Tallahassee, and the affiliated Florida Concrete Pipe Co. at Ocala.

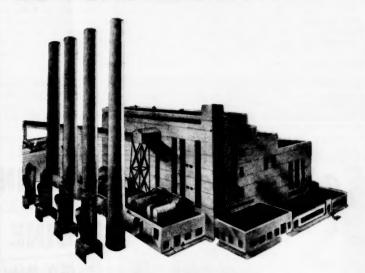
Appointment of H. J. Yarbrough as manager of the Birmingham, Ala., branch

of Wall Colmonoy Corporation, has been announced by Wm. P. Clark, vice-president in charge of sales. The Birmingham branch is located at 615 N. Ninth St., Birmingham 3. This is one of eight branches. Its territory covers Alabama, Georgia, Tennessee, and the northern part of Florida.

The Pfaudler Co., Rochester, N. Y., announces the appointment of Joseph D. Libbey, Jr., as direct company representative for Washington, D. C., and the Virginia, North Carolina, South Carolina and Maryland territory. Mr. Libbey is located at 1005 Bonifant St., Silver Spring, Md. . . .

The Diamond Chain Co., Inc., Indianapolis, Ind., announces the appointment of Mr. Jack E. Cooper as Southeast District Manager, with headquarters in Atlanta. The office address is 92 Fourteenth St., N.E., Atlanta, Ga. Mr. Cooper, prior to his appointment as district manager in Atlanta, served as sales representative in the Chicago office of Diamond.

## WE PLAN AHEAD...



## BUILD AHEAD

... and because we do there has never been a shortage of power in the 23 counties served by the SCE&G system. We've met the stepped-up demand for electrical power all along the 7,158 pole miles of our transmission and distribution network.

Our newest and biggest power producer, Urquhart Station, is a direct result of SCE&G's planning ahead and building ahead. At a cost of about \$45,000,000, the plant will have an ultimate capability of 300,000 KW.

When the first two units of this giant station begin to operate this summer, 150,000 KW of steam generated, firm, dependable electricity will be added to the power available throughout our system.

### SOUTH CAROLINA ELECTRIC & GAS CO.

COLUMBIA, SOUTH CAROLINA

#### BUSINESS NOTES

Gerotor Corporation announces the removal of its electric products division, geophysical exploration division, geophysical instrument company division, to a newly constructed plant and office building at Manassas, Virginia.

Transfer of headquarters and sales offices of the Pioneer Pump Division to 2750 Guardian Building, Detroit, Mich., and transfer of manufacturing operations to a new plant in Paris, Kentucky, has been announced by J. Thomas Smith, president of Detroit Harvester Co.

The Owatonna Tool Co., Owatonna, Minn., has inaugurated warehouse service from Atlanta, Ga. The new warehouse address is in c/o of Factory Warehouse Service, 76 Fourth St., N.W., and the telephone is Vernon 9712.

The merger of Luscomb Airplane Corporation with and into Temco Aircraft Corporation has been completed, and Luscomb will henceforth be known as The Garland Plant of Temco.

G. M. Davis & Son, Palatka, Fla., has announced that effective July 1, 1953. they are discontinuing the manufacture of cypress tanks and their accessories. All real estate and buildings have been sold. The company requests that all orders for

any of its products be placed prior to June 15. After that date all tools and machinery and any remaining merchandise will be sold. The new owners of the property will not continue in the same line of business.

Stockholders of Combustion Engineering-Superheater, Inc., at their annual meeting on April 14, voted to shorten the company name to Combustion Engineering, Inc.

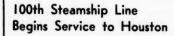
At the same time the Board of Directors elected the following officers to new posts: Joseph V. Santry, president, was elected Chairman of the Board, and will continue as chief executive officer; Samuel G. Allen retired as Chairman of the Board, but will continue as chairman of the executive committee; Martens H. Isenberg, executive vice-president was elected president; George D. Ellis, vice-president and comptroller was appointed vice-president in charge of finance, succeeding Harold H. Berry, who has reached the retirement age. Mr. Berry will continue as a director.

On April 27 the Pittsburgh Corning Corporation moved its general offices from 307 Fourth Ave. to new quarters at 1 Gateway Center, Pittsburgh 22. Located at this new address are the company's executive sales and accounting divisions. Westinghouse Air Brake Co. has purchased the earth-moving tractor and related business of R. G. LeTourneau, Inc., its international sales and distribution organization, and its Peoria, Ill., and Toccoa, Ga., plant. The LeTourneau Co. will retain and continue to operate the Vicksburg, Miss., and Longview, Texas, plants, and manufacture special products for the U. S. Government, land-clearing equipment, cranes and other products not related to earth moving.

The establishment of St. Louis as a sales office, and the opening of a sales sub-office in Houston, has been announced by Hercules Powder Co.'s synthetic department. John A. Autenrieth, has been named manager of the St. Louis territory, which includes Missouri, Kansas, Arkansas, Texas, Oklahoma, Louisiana, Mississippi, and parts of Illinois and Tennessee. Henry D. Heiser, has been named resident technical sales representative in Houston. The new office there will be located in the City National Bank Building.

Mr. George S. Sangdahl was elected a vice-president of the Chicago Bridge & Iron Co. on April 13. He has been associated with the company since 1915. On May 4 Mr. Sangdahl became manager of a new sales office which the company opened in Pittsburgh, Pa., in the new Alcoa Building.

Appointment of Joseph H. Jones as an assistant district manager of Republic Steel Corporation's central alloy district in Canton and Massillon, Ohio, has been announced. Succeeding Jones as superintendent of Republic's Massillon steel plant is Robert P. Carpenter. Both appointments became effective May 1.



The 100th steamship line to serve Houston has begun operating out of the port.

The line—Brocklebanks Cunard Service (Gulf)—inaugurated a run between Houston and India and Pakistan with the arrival of the Magdapur, which tied up here for a four-day stay.

Up until Cunard line extended its service to include Gulf ports, the Port of Houston was served by 99 steamship lines. In addition, more than 95 tanker lines, and a number of coastwise services operate from the port.

Announcement also has been made that another coastwise steamship service, Pan-Atlantic Steamship Company, will begin service from the port June 13.

Pan-Atlantic will operate a weekly cargo-passenger service between Houston, other Gulf ports, and New York, Philadelphia, and Baltimore.



Every one of the traditional Wisconsin 4-cylinder features are built into this new model.

These include, to name a few, tapered roller main bearings, dynamically balanced

forged crankshaft, mirror finish on crank pins, Stellite-faced exhaust valves and valve

The Model VG4D engine is definitely Tops in Performance, delivering a maximum of

wer per pound of engine weight, at minimum operating and maintenance costs.

seat inserts and honed cylinders for long, dependable, heavy-duty engine life.

equipment where weight and space limitations are important factors.

We invite your request for complete detailed specifications.

#### FINANCIAL NOTES

Earnings of Lion Oil Co. for the first quarter of 1953 were announced in an interim statement released May 6. Net income for the period after provisions for taxes on income was \$2,840,286, or 92¢ per share on the 3,090,886 shares outstanding at the end of the quarter. For the same period last year net income was \$3,329,-695, equivalent to \$1.08 per share on the basis of the shares outstanding on March 31, or \$1.24 per share on the 2,690,861 shares outstanding at the same date a year ago. Sales and operating revenues for the quarter were just slightly below those of the first quarter of 1952. Net income before taxes was \$4,722,005 as against \$5,942,701 in the like period of the previous year.

Mr. E. A. Yates, Chairman of the Board of The Southern Company, announced that the Board of Directors of the company at a meeting held at Atlanta, Ga., on April 13, declared the regular quarterly dividend of 20¢ per share on common stock payable on June 6, 1953, to holders of record at the close of business on May 12, 1953.

Net sales of International Minerals and Chemical Corporation for the nine months ended March 31, were \$63,994,231, compared with \$58,421,381 for the corresponding nine months period a year ago, an increase of 7.8 per cent. Earnings before income taxes for the period were \$6,370,298 as compared with \$6,275,511 for the corresponding period the year before.

Hercules Powder Co. reported for the three months ended March 31, net income, equal, after preferred dividend, to \$1.16 a share of common stock. In the first quarter of 1952 the company reported earnings of \$1.10 per share of common. Net sales and operating revenues for the quarter were \$47,031,209 compared with \$48,019,899 in the first quarter of 1952.

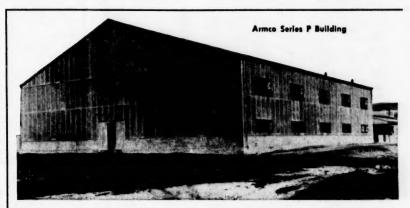
Net earnings after taxes for the twelve weeks ended March 22 for **The Mead Corporation**, were \$1,307,627, compared with \$1,195,260 for the first twelve weeks in 1952. After provision for the regular dividend on the preferred shares, and based on the 1,145,785 common shares outstanding on March 22, earnings amounted to \$1.09 per common share, compared with 99¢ for the corresponding period of 1952.

Net sales of Air Reduction Co., Inc., for the quarter ended March 31, totaled \$32,965,984. This compares with \$31,156,933 for the first quarter of 1952. After provision for federal and foreign taxes on income totaling \$2,221,826, net income for the first quarter was \$1,842,916. This compares with \$1,952,153 for the first quarter of 1952. After provision for the preferred stock dividend earnings per share on the

common stock were 57¢ per share for the first quarter. This compares with earnings of 61¢ per share on the common in the first quarter of 1952.

Report for the first quarter of 1953 of the Youngstown Sheet & Tube Co., released April 28, showed net income of \$6,958,975, or \$2.08 per share, as compared with \$7,038,787, or \$2.10 per share for the first quarter of 1952. Despite the larger volume of business, \$140,564,614, compared with \$125,021,321, the margin of profit on sales was only 5 per cent in the first quarter of this year, as against 5.7 per cent for the same period a year ago.

The State Utilities Commission has approved a \$500,000 rate reduction by Carolina Power & Light Company in the area served by the former Tide Water Power Company.



## These buildings let you "Second Guess"

Looking into the future is difficult. But with Armco Steel Buildings you can rearrange at any time or make extensions with standard building parts—or dismantle and re-erect the buildings on a new site without loss of material. Cost is low.

ARMCO SERIES S BUILDINGS, with unique STEELOX panels, are from 4 x 4 feet to 40 feet wide by unlimited length.

ARMCO SERIES P BUILDINGS, built of steel framework covered by corru-

gated metal sheets, satisfy requirements for larger structures. Widths are from 20 to 100 feet in clear spans with unlimited lengths.

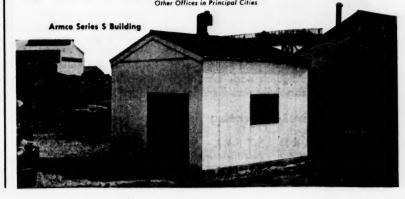
Both types of Armco Buildings are easy to erect. They are weather-tight, noncombustible. There is nothing to crack, warp or rot. Write for data.

### ARMCO STEEL BUILDINGS



#### ARMCO DRAINAGE & METAL PRODUCTS, INC.

DIXIE DIVISION
619 Forsyth Bidg. • Atlanta, Georgia
SOUTHWESTERN DIVISION
3500 Maury St. • Houston, Texas



## New Plants

PORT GIBSON — Mayor and Board of Aldermen received bid from L. B. Priester & Son Construction Co., P. O. Box 4456, Jackson, at \$414,989 for plant building for American Paper Tube Co. John L. Turner, 201-202 Medicai Bidg, Jackson, Archt.

YAZOO 4.17 — Board of Supervisors of Yazoo County received bid from L. B. Priester & Son, P.O. Box 4456, Jackson, at \$19.889 for concrete foundations, floors and loading docks, for warehouse for Mississippi Chemical Corporation plant.

#### MISSOURI

CENTRALIA — A. B. Chance Co., F. Gano Chance, Pres., plans \$250,000 foundry; aiso plans purchase of W. N. Matthews Corp. of St. Louis.

GRAY SUMMIT—Raiston-Purina Co., Donald R. Engish, Chief Engr., 850 S. S. St., St., St., Coll., et al., et contract to E. A. Brunson Construction Co., 4052 Forest Park Bivd., St. Louis, for administration building.

JEFFERSON COUNTY — Mathieson Mississippi Corp., newly-formed joint venture of Mathieson Chemical Corp., Baitimore, Md., and Mississippi River Fuel Corp., considering plans for a fertilizer plant would cost in excess of \$30,000,000; site not determined, but options have been taken on land in Jeiterson County, Mo.; sites in Louisiana and 1exas also under consideration; main plant facilities would cost about \$21,000,000, with the remainder of the \$30,000,000 being used for construction of associated plants and facilities, such as river docks; new plant would produce an anhydrous ammonia phosphoric fertilizer.

ST. 100118 — Clinton Cadiliac Co. (Paul Zatlin) 3368 S. Kursanghway let contract

fertilizer.

ST. IAUIS — Clinton Cadillac Co. (Paul Zatlin). 3636 S. Kingsnighway. let contract to V. & M. Contracting Co., 4030 Chouteau, for \$39,000 showroom addition. John Grunik, 7111 Delmar, University City. Archt.

ST. LOUIS—Kimbel Lines, Inc., 225 Lynch St., let contract to L. & S. Inv. Co., Inc., 8615 Laclede Station Road, Affton, for \$60,000 truck terminal, 215 Lynch St. Harold W. Long, Himmelberger Bidg., Cape Girardeau, Archt.

ST. LOUIS—Orchard Power.

Archi.

ST. LOUIS—Orchard Paper Co., 3914 Union Ave., let contract to The Ideson Co., Inc.,
432 S. Sappington Road, Kirkwood, for \$150,600 warehouse addition.

ST. LOUIS—P. M. Electric Co., 5001 Mackland Ave., let contract to C. E. Dalton, 5124
Deville for \$40,000 office and salesroom, 5280
Fyler Ave.

ST. LOUIS—Southern Real Estate &
Financial Co., John C. Callo

Fyler Ave.

ST. LOUIS — Southern Real Estate & Financial Co., John G. Cella, Pres., 705 Olive St., plans \$1,500,000 parking garage between Market & Chestnut, 6th and 7th Sts. To be operated by Wayco Petroleum Corp., Railway Exchange Bldg. Russell, Mullgardt,

Schwarz, Van Hoefen, 1620 Chemical Bidg., Archts.

#### NORTH CAROLINA

Akers Motor Lines, John M. Akers, Vice-Pres., Gastonia, pians replacement of exist-ing terminal in Savannah, Ga., cost \$150,000: also \$200,000 addition to Gastonia terminal garage: purchase of 100 Fruehauf trailers at \$750,000, and acquisition of 27 tractors costing \$350,000; part of a \$2,000,000 expan-sion program.

ACQUADALE—Southern Lightweight Aggregate Corp., 3011 Dock St., Richmond, Va., plans \$1.000,000 Solite Plant, to be operated by Carolina Solite Corp., a subsid.

plans \$1,000,000 Solite Plant, to be operated by Carolina Solite Corp., a subsid.

ASHEBORO — Burlington Mills, J. C. Cowan, Jr., Pres., let contract to H. L. Coble Construction Co., 1705 Battleground Ave., Greensboro for finishing plant.

CHARLOTTE—J. E. Burnside, Inc., let contract to McDevitt & Street Co., 565 Builders Bidg., for office building, J. N. Pease & Co., 119½ E. Fifth St., Archts.

CHARLOTTE — Carolinas Auto Supply House, 221 N. College St., let contract to Goode Construction Corp., 200 Builders Bidg., for new building, M. R. Marsh, 404 Chatham Bidg., Archt.

CHARLOTTE—Interstate Milling Co., let contract to J. A. Jones Construction Co., 209 W. Fourth St., at \$165,000 for warehouse alterations, J. N. Pease & Co., 119½ E. Fifth St., Archts.

COOLEEMEE—Erwin Mills, Durham, let contract to Gilbert Engineering Co., 638 S. Meeting, Statesville, for additions to filter plant, J. E. Sirrine & Co., Greenville, S. C. Archts.

FLETCHER — Cranston Print Works Co.

Archts. FLETCHER -

Archts.

FLETCHER — Cranston Print Works Co. let contract to Fiske-Carter Construction Co., Masonic Temple Bldg., Greenville, S. C., for extension to plant. J. E. Sirrine Co., 215 S. Main St., Greenville, S. C., Archts.

GREENSBORO — Adamson Cadillac-Oldsmobile Co. let contract to Brooks Lumber Co. for building repairs; to H. L. Cobb for plumbing; to W. H. Sullivan, Inc., for heating; to Starr Electric Co. for electrical work: Charles C. Hartmann & Son, 120 Jefferson Bldg., Archts.

JACKSONVILLE — Jones-Onslow Electric Membership Corp., let contract to M. L.

Charles C. Hartmann & Son, 120 Jefferson Bldg, Archis.

JACKSONVILLE — Jones-Onslow Electric Membership Corp., let contract to M. L. Skinner, New Bern, N. C., for \$81,700 Head-ouarters Building and adjoining garage unit. Wm. A Coleman, Inc. Kinston, N. C., Archt, LACKINBURG — Dixle Guano Co., Inc., constructing addition to present olant. Steelframe structure produced by Luria Engineering Co., Bethlehem, Pa.

MARSHALL—French Broad Electric Membership Corp., received \$97,000 bid from W. G. Hollifield, Asheville, for headquarters building. Six Associates, Inc., Asheville, N. C. Archts.-Engrs.

MORGANTON—E. D. Alexander received bid from Frank D. McCall. Drexel, for \$53,000 auto sales and service building, Ormand & Vaughn, Inc., Shelby, Archts.

ROANOKE RAPIDS—Tri-City Motor Co., Inc., received bids for new building. G. Milton Small, Jr., Raleigh, Archt.
ROANOKE RAPIDS—Virginia Electric Power Co., let contract to Stone & Webster Engineering Corporation for construction of

concrete dam.

ROCKY MOUNT — Graybar Electric Co.,
Inc., Richmond, Va., received bids for building. Harry J. Harles, 233 Hammond St.,

Archt.
SHELBY — Bressant, Inc., acquire tract to erect plant for manufacture of metal-cutting instruments.
SYLVA—Jackson County Industries, Inc., plans building to be leased to Skyland Textile Co., Morganton, for \$450,000 textile plant.

plant.
WINSTON-SALEM — Sovelco Mills, Inc.,
Fred Heilbrunn, Pres., 102 Fifth Ave., New
York, N. Y., plans leasing Perkins and Newman warehouse, 25th St.

#### SOUTH CAROLINA

ARCADIA—Mayfair Mills let contract to Daniel Construction Co., Inc., 429 N. Main St., Greenville, for additions and alterations to Main Mill, J. E. Sirrine Co., Greenville, Archts.-Engrs.

FIORENCE — Air Maintenance & Sheet Metal, Inc., R. S. Henry, Pres., plans moving airplane repair and maintenance plant from Miami, Fla.

GREENVILLE—P. S. West Construction Co., 430 S. Center St., Statesville, N. C., has \$39,650 contract for TV Station, J. W. Griffith, Jr., Greenville, Archt.

GREENVILLE—Union Bleachery let contract to Morris Construction Co., Greenville News Building, for plant addition.

MYRTLE BEACH — Aerovox Corp., Dick Bowers, Genl. Mgr., plans \$350,000 building, NEWBERRY — Kendall Mills, Charlotte, N. C., let contract to Fiske-Carter Construction Co., Masonic Temple Bidg., Greenville, at \$41,085 for two warehouses.

SENECA — Jantzen Co., Paul DeKoning, Vice-Pres. & Genl. Mgr., Portland, Ore., plan manufacturing plant .

SENECA — Jantzen Co., Paul DeKoning, Vice-Pres. & Genl. Mgr., Portland, Ore., plan manufacturing plant .

SENECA — Jantzen Co., Portland, James & DuRant, 128 E. Liberty St., Archts.

SUMTER — Sumter Telephone Co., plans telephone building. Lyles, Bissett, Carlisle & Wolff, 1321 Bull St., Columbia, Archt.

#### TENNESSEE

CALHOUN — Bowaters Southern Paper Corp., J. C. Nelson, Procurement Office, Fraser, Brace & Roane-Anderson, let contract to Brice Building Co., Inc., P. O. Box 1928, Birmingham, Ala., for facilities building, Celli-Flynn, McKeesport, Pa., Archt. CHATTANOOGA—General Dyestuff Corp. received bid from John Martin Co., 610 W. Manning, for \$148,386 warehouse. William Crutchfield, Archt. CLARKSVILLE—Engineering Division of International Minerals & Chemical Corp., 20 N. Wacker Drive, Chicago, Ill., plan new fertilizer plant.

fertilizer plant. HUNTINGDON -

International Minerals & Chemical Corp., 20
N. Wacker Drive, Chicago, III., plan new fertilizer plant.
HUNTINGDON — Publix Shirt Corp., received bids for warehouse addition. Johnson, Jones & Reynolds, Starkville, Miss., Archts.
LOUDON—Charles H. Bacon Co., Lenoir City, plans expansion program; building to cost addrox. \$250,000.
MARYVILLE—Chamber of Commerce received bids for factory building for Tennessee Textile Corp. Lindsey & Maples, 114
Washington Ave., Archts.
MEMPHIS — Bauer's, Inc., received bids for warehouse and office building. Wiseman & Bland, Archts.
MEMPHIS—Hunter Fan & Ventilating Co. let contract to Seth E. Giem & Assocs., 801
Roland, for \$1,000,000 two-to-five year plant building program. Walk C. Jones-Walk C. Jones Jr., 1215 Poplar Ave., Archts.
MEMPHIS—Charles Reed Buick Co. let contract to Whitsitt Construction Co. for building. Hanker & Heyer, Commerce Title Bide, Archts.
NASHVILLE — The Crane Co., Chicago, III., plans \$25,950 000 titanium plant.
OAK RIDGE—U. S. Atomic Energy Commission let contract to Kerl Koch Erecting Co., Inc., of New York for erecting steel on radiation research facility at \$500,000; also let contract to Charles Hobson Co., Inc., Knoxville, Tenn., for site preparation, utilities and concrete work at \$486,320.

#### TEXAS

Atchison, Topeka & Santa Fe Railway plans construction of new track by Santa Fe from its main North-South line near Sanger to Addison, and obtaining trackage rights on Cotton Belt between Addison & Dallas.

## GARY WELDED GRATING

Send for attractive paper-weight sample, which is yours for the asking. Catalogues upon request.

Square edge bars for safe footing. Hexagonal cross bars for neat appearance.

Gary-Riveted Grating :: Gary Stair Treads

STANDARD STEEL SPRING COMPANY Open Steel Floor Grating Division

4001 East Seventh Ave., Gary, Indiana

Lone Star Gas Co. plans \$3,269,000 con-

Lone Star Gas Co, plans \$3,269,000 construction program.

Resitol Hats, Inc., Harry Rolnick, Pres., plans hat body factory in East Texas; exact location not yet disclosed.

ALVIN-Southern Warehouse Corp., 1410 Clinton Drive, let contract to Spaw-Glass, Inc., 2518 Times Blvd., Houston, at \$43,645 for sack rice dryer structure. Ernest L. Shult, 5009 Fannin, Houston, Archt.

AMARILIO—Gatlin Glass Co., 417 E. 1114.

St., plan \$20,000 additions and repairs to existing building. 3rd & Grant Sts., Ward & Chisolm, 721 W. 7th St., Archts.

AMARILIO—Texas Co. let contract to Jack Graham, 732 N. Grand, for refinery addition, 3600 E. Third St.

AMARILIO—Texas Co. let multi-million dollar contract to M. W. Kellogg Co., subsid. of Puliman, Inc., in connection with modernization of Amarillo Refinery.

AUSTIN—Virginia Black Duplicator Shop. 11th & Trinity, plans remodeling and addition to shop. Pindley, George & Bowman, 2410 San Antonio St., Archts.

BAYTOWN—Humble Oil & Refining Co. plans storage building.

BAYTOWN—Humble Oil & Refining Co. plans torage building.

plant.

BEAUMONT — Magnolia Petroleum Co.
plans \$27,000,000 refinery addition.

BEAUMONT — Wonder Rice Mills. 4600
Clinton Drive, Houston, to construct 2 unit rice dryer at Comet Rice Mills Plant, \$100,-000.

rice dryer at Comet Rice Mills Plant, \$100,-000.

BIG S. RING.—Cosden Petroleum Corporation plans \$2,500,000 plant.

BROWNSVILLE.—Volkart Brothers, Inc. received bid from Wedegartner Construction Co. P. O. Drawer 711, for \$20,970 office building and cotton classing facilities. A. H. Woolridge, 6 Anthony Bldg., Archt.

CANYON.—Southwestern Bell Telephone Co. K. A. Ganssie, Chief Engr., 308 S. Akard St., Dallas, let contract to M. S. Downing, 2509 Ninth Ave., Amarillo, for community dial office building.

DALLAS.—Chance Vought Aircraft, P. O. Box 5907, let contract to James Stewart & Co., 800 Employers Insurance Bidg., at \$796,-940 for alterations and additions to office building, No. 2. Wiltshire & Fisher, 5217 Ross Ave., Archts.

DALLAS.—Chance Vought Aircraft, P. O.

Ave., Archts.

DALLAS—Chance Vought Aircraft, P. O.
Box 5907, received bid from Carpenter
Brothers, 1335 Plowman, for \$130,500 repairs
and additions to sewage treatment plant.
Corgan, Lane & Associates, Melba Bidg.,
Archts.

and additions to sewage treatment than Corgan, Lane & Associates, Melba Bldg.. Archts.

DALLAS—Hubert M. Cook & Assoc., received bid from Jansen Construction Co., 1203 Powhattan, at \$178,918 for warehouse, City of University Park addition: \$14,943 on electrical work from Gotham Electric Co., 2508 Commerce; \$12,779 on electrical work from Beard Plumbing, 510 W. Davis; \$19,777 on sprinklers from W. H. Layden, DeWitt & Swank, 2025 Cedar Springs, Archts.

DALLAS—General Tire & Rubber Co., C. L. Howes, Mgr., let contract to McFadden & Miller, 402 S. Oakland, for warehouse addition, 1000 Dragon St. Jacob E. Anderson, 4409 Coles Manor Place, Archt.

DALLAS—Texas & Pacific Railway reviewed bid from Jansen Construction Co., 1203 Powhattan, for building alterations and additions, 1025 Elm. Smith & Mills, 921 Mercantile Bank Bldg., Dallas, Archts.

DALLAS—Universal Film Exchange, 310 S. St. Paul, let contract to S. S. Jacobs, 810 S. Harwood, at \$104,000 for one-story and basement office and film exchange building, 316 S. St. Paul, kemp, Bush & Jackson, Archts.

DALLAS — William Volker & Co., 1700 Cockrell St., let contract to Churchill & Barry, 212 Life of America Bldg., for \$50,000 warehouse addition.

FORT WORTH—Bell Aircraft Corp., 2710 N. Commerce St., plans \$337,000 plant expansion.

Sion.

FORT WORTH — O. M. Franklin Serem Co., 2711 N. Main, let contract to Covington Brothers, 3316 N. Hardey, for one-story warehouse and office, cost \$100,090.

FORT WORTH — Porland Cement Co., Fort Worth Plant, let contract to Cain & Cain, Majestic Bidg., at \$26,900 for new bath house for Portland Cement Co., Trinity Portland Cement Division. Preston M. Geren, 1607 Fort Worth National Bank Bidg., Archt.-Engr.

Portland Cement Brown Bank Bldg., Geren, 1607 Fort Worth National Bank Bldg., Archt.-Engr.

HABLINGEN — Southwestern Bell Telephone Co., K. A. Gansle, 308 S. Akard St., Dallas, received bids for alterations and additions, central office building, Jameson & Merrill, 820 N. Harwood St., Dallas, Archts.-Engrs.

Merrill, 820 N. Dalands.

HOUSTON—Chase Brass & Copper Co. let contract to Robert H. Smith & Co., 1915 Kolfahl St., for remodeling building 16 Drennan St.

HOUSTON—Continental Box Co., 2324 Maure let contract to Gulf Steel Co., 821

Maury, let contract to Gulf St Chelsea, at \$85,000 for building.

HOUSTON — Flexicore of Texas, Eugene M. Swenson, Chicago, Ill., let contract to Manhattan Construction Co., Commerce Bidg., for \$150,000 plant.

HOUSTON—Gaylord Container Corp., 6020 Navigation Blvd., let contract to L. O. Stocker Co., 3928 Lindell Blvd., St. Louis, Mo., for plant addition.

HOUSTON—General Metals Corp. let contract to Tellepsen Construction Co., P. O. Box 2536, at \$77.700 for office building. Roy W. Leibsle, 3702 Almeda Road, Archt.

HOUSTON—Globe-Union, Inc., Milwaukee, Wis., to negotiate contract with Henry C. Beck Co., 1st National Bank Bidg., Dallas, for battery plant, N. E. cor. 12th St. & Glenleigh Drive. Forrest & Cotton, 803 Praetorian St., Dallas, Archts.

ieign Drives St., Dallas, Archts. HOUSTON—W. D. Haden Co. let contract to F. G. Lowry Co., 102½ Heights Blvd., for warehouse. Milton McGinty, 2425 Ralph St.,

Archt.

HOUSTON — Hahn & Clay, 5100 Clinton Drive, let contract to Farnsworth & Chambers Co., Inc., Box 74, for \$92,000 warehouse addition.

HOUSTON — Houston Lighting & Power Co., \$65,000 plant additions.

HOUSTON — Hughes Tool Co. 5425 Polk Ave., let contract to Tellepsen Construction Co. P. O. Box 2536, for building.

HOUSTON — M. & M. Building Corp. let contract to W. S. Bellows Construction Corp., 716 N. Everton, at approx. \$310,000 for 508-car garage.

car garage. HOUSTON car garage.

HOUSTON — Magnet Cove Barium Corp.,
5001 Richmond Road, let contract to Linbeck
Construction Corp., P. O. Box 13007, for
8445.622 office and laboratory building.
George Pierce-Abel B. Pierce, 4511 Kyle St.,

George Pierce-Abel B. Pierce, 4511 Kyle St., Archts.

HOUSTON—Markle Steel Co., 1700 Deland St., let contract to Harold Van Buskirk & Co., Inc., for office building addition. Koetter & Tharp, 1103 S, Shepherd St., Archts.

HOUSTON — Missouri Pacific Lines, 402 Union Station, received bid of \$71.519 from Robert H. Smith & Co., 1915 Kolfahl St., for additions to Settegast Yard bidg.

HOUSTON—Murray Rubber Co. let contract to O. L. Allen Co. at \$30,879 for building and concrete parking area, 5205 Canal St. Floyd & James, Houston, Archts.

HOUSTON—Perl Pillow Co. let contract to I. Fallis, 3314 Arbor, for \$75,000 ware-house, 5730 Harvey St.

HOUSTON—Southwestern Beil Telephone Co. K. A. Ganssle, 308 S. Akard St., Dallas, received bids for addition to exchange build-ing, Greens Bayou Ash St. bet, Market & Elm

Sts. HOUSTON — Strickland Transportation Co., Inc., 2917 Gulden Lane, Dallas, let con-tract to Pence Construction Corp., P. O. Box 226, Bellaire, for \$53,700 truck terminal. George W. Edwards, 1509-A. Cochran St., Pallas

226. Bellaire for \$53,700 truck terminal. George W. Edwards, 1509-A. Cochran St., Dallas, Archt.
HOISTON.— Uvalde Rock Asphalt Co., 1706 Oliver St., let contract to O'Rourke Construction Co., 4011 Koehler, for remodelling existing plant.
HOISTON.— Wagner Hardware Co., Eugene Wagner, let contract to Schneider Construction Co., 3004 W. Dallas, for \$27,800 warehouse, 2332 Times Blvd, Harry A. Turner, 2502 Robinhood, Archt.
HOISTON.—T. L. Walker Co., 1419 Caroline, revised plans and soon call for bids for office and warehouse building, 1905-7 Hutchins St. Lenard Gabert & William J. Wisdom, 1315 Bell, Assoc. Archts.
LIBERTY.— McLendon Motor Co., Forder, Poly Box 3220 Baytown, Archt.
LONG POINT—Lone Star Sulphur Co. let contract to H. K. Ferguson Co., 2620 S. Main St., Houston, at approx. \$300,000 for water treatment plant.
LONG VIEW.—A. James Henry has plans

St. Houston, at approx. Salvicov for reatment plant.

LONGVIEW—A. James Henry has plans in progress for TV station and studio. W. L. Kelly. Glover-Grim Bldg. Archt.

LONGVIEW — Nush Longylew, Inc., c/o
Mrs. W. W. Bradley. Gladwater, receiving bids for one-story auto agency building.

\$100.000.
LONGVIEW — Pipe Line Service Corp., Chicago, Ill., let contract to W. L. Pelphrey Co., Gladewater, for manufacturing plant, LUBBOCK — Coca Cola Bottling Co. let contract to W. G. McMillan for plant addition. Atcheson & Atkinson, 204 Sanford Bidg., Archite

Archts.

LUBBOCK—C. R. Nix, Plainview Highway, let contract to Vickery & Nelson, c/o
Jack Nelson, 1005 29th St., at approx. \$22,000 for 1-story business building, 3302-04

34th St. LUBBOCK -34th St.

LUBBOCK — Jim Spears received \$29.732
bld for building addition from BMFP Construction Co. P. O. Box 1595, Atcheson &
Atkinson, 204 Sanford Bldg., Archts.

(Continued on page 60)

## OLSTEEL RIIILD



#### MANUFACTURE BUILDINGS

We learn what you want then make it and put it up for you.

Of course we stick to materials and designs we've found to be best. It must be firesafe-economical-durable, or we don't use it.

Building miles of steel buildings and roofs has taught us how to do what you want and need.

You can plan your own HOLSTEEL BUILDINGS with our Bulletin 5201. Ask for it.

### HOLSTON STEEL STRUCTURES

**Manufacturing Builders** 

P. O. Box 422

BRISTOL, TENN.

Phone South 3610

## **New Plants**

LUBBOCK—Western Warehouse Co., Arch Underwood in charge, 2000 Avenue C, plan one-story warehouse, \$37,000.

MONTAGUE—Bowle Gas Co. let contract for \$2,200,000 gas plant to Hudson Engineering Co., 2711 Danvale.

ROCKWALL—Texas Aluminum Co., Inc., Dallas, let contract to Churchill & Barry, Life of America Bidg., Dallas, for plant.

SAN ANTONIO—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssie, Chief Engineer, to receive bids for alterations and additions to administration and equipment building: first step in a \$5,000,000 expansion program.

0,000 expansion program. SAN ANTONIO — Studer's, Inc.

SAN ANTONIO — Studer's, Inc., 402 San Pedro Ave., plans building remodeling, 1703 Fredericksburg Road. Cerf Ross Assocs., 111 Auditorium Circle, Archts.

SPRING BRANCH — Southwestern Bell Telephone Co., K. A. Ganssie, 308 S. Akard St., Dallas, let contract to Thad Dederick. P. O. Box 13067, Houston, for addition to "Holbrook-5" office building, Cato, Austin & Evans, 2103 Crawford, Houston, Archts. SULPHUR SPRINGS—Rockwell Manufacturing Co., Lloyd A. Dixon, Jr., Vice-Pres. of Meter and Valve Div., new valve and meter plant.

SULPHUR SPRINGS—Rockwell Manufacturing Co., Lloyd A. Dixon, Jr., Vice-Pres. of Meter and Valve Div., new valve and meter plant.

TAYLOR — Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, received bits for dial building.

TEXARKANA — Woodlin Metal Products Co., Marshall, Mich., to establish plant manufacturing windows and ventilating assemblies for trailers.

TYLER—General Electric Corp., 202 State St., Schenectady, N. Y., plans manufacturing plant, cost bet, \$1 million and \$2 million. VICTORIA — Victoria Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Baass Brothers, Goliad Highway, for dial building, Gill & Harrell & Associates, 1913 San Jacinto, Dallas, Archts.-Engrs.

#### FACTORY SITE WITH EVERYTHING

unlimited water, natural gas, on railway and high-way, low taxes and utility rates, near New Orleans, in growing small city, new million dollar hospital, modern adequate schools, climate approaches perfection, ample native born labor, good labor relations.

Locate in the Deep South's outstanding community.

Ask for brochure.

Chamber of Commerce, Picayune, Miss.



Savere ten Coments Company

WESLACO—Joe Tauerman plans display building for show room shops. Cocke, Bow-man & York, 1220 W. Harrison St., Harlin-

gen. Archts.

WITCHITA FALLS — Dimock Building
Co., George Dimock, Oil & Gas Bidg., received bid from A.B.C. Construction Co.,
3000 Ninth St., for office building. Turner &
Killebrew, 803 Bliff, Archts.

#### VIRGINIA

DANVILLE — T. B. Richardson Lumber Co., Birmingham, Ala., plans \$1,000,000 box and crate factory, U. S. Route 360.

NORFOLK—Chesapeake & Potomac Telephone Co., 8910 Granby St., let contract to R. R. Richardson & Son, for addition to building, Section C. Carneal & Johnston, Archts.-Engrs.

NORFOLK—Graybar Electric Co. let contract to A. & P. Construction Co., 419 W. 22nd St., at \$153,579 for wholesale building. Alfred M. Lublin, Archt.

RICHMOND—International Packing Corp., George C. Crump, Pres., plans installation of \$300,000 plant for culture of electronic rystals.

\$300.000 plant for culture of electronic crystals.

RICHMOND — Jones Motor Car Co. let contract to J. Kennon Perrin Co. for alterations and additions. C. W. Huff, Jr., Archt. RICHMOND — Philip Morris & Co. Ltd., Inc., received bid from R. H. Wattinger, 405-A E. Franklin St., at \$274,800 for alterations 20th St. factory and stemmery. Baskervill & Son, 2313 W. Cary St., Archts.

RICHMOND—Steel Service, Inc., received bids for office building. Courtenay S. Welton's Sons, 106 S. 3rd St., Archts.

WINCHESTER — Novick Transfer Co., Inc., received bids for office building. H. L. Katz, Baltimore, Md., Archt.

#### WEST VIRGINIA

American Gas & Electric Service Corpplan construction program for years 1953 and 1954. Estimated expenditure in 1953, \$127,000,000. Financed by sale of 800,000 additional shares of Common Stock.

BELLE—Belle Alkali Co. granted certificate of necessity for \$470,000 plant facilities.

BELLE—Diamond Alkali Co., Raymond F, Evans, Pres., Cleveland, Ohio, plans to acquire Belle Alkali Co.
FAIRMONT—Westinghouse Electric Corpplans \$1,000,000 expansion program; granted certificate of necessity.

ROUND BOTTON—Wheeling Electric Co. granted certificate of necessity for \$466,446 plant facilities.

ST. ALBANS—Eastern Manufacturing Co., L. T. Halstead, Pres., propose new plant.

SOUTH CHARLESTON — Bakelite Co. proposes new plant.

WEIRTON—National Steel Corp. planning \$5,000,000 expansion at its Weirton Steel Co. subsidiary.

WHEELING—Manufacturers Light & Heat

Co. subsidiary.
WHEELING—Manufacturers Light & Heat
Co. plans compressor station; cost \$500,000.

#### **C&P** Telephone Authorizes \$2,474,000 for Expansion

Expenditures of \$2,474,000 for the improvement and expansion of telephone facilities in Maryland were authorized April 27 by the board of directors of the Chesapeake and Potomac Telephone Company of Baltimore City.

An expenditure of \$278,000 was approved for the installation of outside cable and wire in connection with the rearrangement of underground and aerial telephone lines in areas to be served by the proposed York Road dial center in North Baltimore.

The provision of additional dial equipment at Annapolis and the installation of more long distance circuits on the Annapolis-Hyattsville and Annapolis-Washington routes was authorized at a cost of \$197,000.

Expenditures totaling \$150,000 were authorized for the provision of additional equipment in the company's central of-fices at Ellicott City, Easton, Fork, Leonardtown, Oakland and La Plata.

More than \$93,000 was allocated for the expansion and extension of outside telephone line facilities between Chestertown and Fairlee and Chestertown and Pomona. The project involves the placing of approximately 14 miles of aerial cable, 220 poles and 86 single miles of wire.

Total expenditures of \$2,474,000 allocated by the board for the improvement and expansion of telephone facilities in Maryland included enlargement of cable facilities in Hagerstown, Ocean City, Reisterstown and Suitland. Also authorized were a new telephone building and switching equipment at Landover and additional dial equipment in the Hyattsville area.



Fabricated Lead and Polyethylene lined equipment for the Rayon, Chemical, Textile, By-Product Coke, and Plating Industries.

#### SOUTHERN LEAD BURNING CO. ATLANTA 2, GEORGIA P. O. Box 4627 Phone Wg 2576



#### **OUALITY HOT DIP GALVANIZING**

JOSEPH P. CATTIE & BROTHERS INC.

2520 East Hagert Street

Phone: RE 9-8911

Philadelphia 25, Pa.

Bristol Steel & Iron Works, Inc. DESIGNERS - FABRICATORS - ERECTORS STRUCTURAL STEEL



For Buildings, Bridges and All Industrial Purposes BRISTOL, VIRGINIA-TENNESSEE Capacity: 1500 to 2000 tons per month.



#### WANTED GENERAL SUPERINTENDENT

qualified to take charge of field operations in industrial building department with General Contractor operating in the Southeastern States. Annual volume of business in excess of 25 million. Applicant must be a graduate engineer with good personality, able to conduct business with clients and have successful record as superintendent on heavy industrial construction and installation of equipment, with experience on Pulp and Paper Mills, Cement and Fertilizer Plants. Excellent salary. Write

No. 9801 c/o MANUFACTURERS RECORD Baltimore 3, Md.

#### FOR LEASE

Three story brick building, 5,000 feet office and 31,000 feet warehouse space. Sprinkler, freight elevator, rail siding, parking area. Conveniently located near center of Charlotte and ideal for distributor or district warehouse. Available about July 1.

**Trust Department** WACHOVIA BANK & TRUST CO. CHARLOTTE, N. C.

#### INDUSTRIAL SITE CONTAINING 230 ACRES NOW AVAILABLE FOR LEASE

Located above Moisant International Airport, site adjoins Pan-Am Southern Corp. Plant, and has 1000' deep water frontage on Mississippl River and 1000' frontage on main highway into New Orleans. All utilities including two railways, natural gas, water, etc. Rental \$16,000 per annum.

LUTHER L. ELFER—Realtor 8225 Pritchard Place New Orleans 18, La.

### **FACTORY SPACE FOR RENT**

Brick building 33,000 sq. ft. Complete sprinkler system, railroad siding, new heating plant, long lease available at low

Box 5020, Biltmore, N. C. Phone 6407 Asheville, N. C.

#### ■ Situation Wanted

"Let Me Work For You"
25 years practical knowledge South's Industrial possibilities. Excellent correspondent, thorough on statistics & facts for accurate surveys & reports. Desire connection with County, State, Regional, or National group promoting industrial development. Age 49, family, A-1 health.

Write No. 9802, c/o Manufacturers Record, Baitimore 3, Maryland.

#### ■ Inventions for Sale

MANUFACTURERS—Write for our FREE Classification Sheet of Inventions for Sale, covering 135 main subjects, and in one or more of which you will doubtless be interested. ADAM FISHER CO., 578 Enright, St. Louis, Mo.

#### ■ Patent Attorneys

EATON & BELL
PATENT ATTORNEYS
904 Johnston Bidg., Charlotte, N. C.
19 Munsey Building, Washington, D. C.

10' Betts Vertical Boring Mill, 2 heads motor drive

42" x 36" x 8' Pond Planer, 2 heads motor

36" x 36" x 14' Cincinnati Planer, 3 heads motor

24" x 22' Fitchburg Lathe, 17' centers

24" x 16' New Haven Lathe, 11' centers

#### CLARENCE J. O'BRIEN

15th and Market Sts., Philadelphia 2, Penna.

#### FOR SALE

#### WANTED

Tractors, buildozers, cranes, shovels, air compressors, low boys and tandem trailers. Phone, wire or write:

WEBER AND COMPANY Box 8037 Chattanooga 11, Tennessee Phone 4-2622



NEW and REDUILT MOTORS GINERATORS
TRANSPORMERS
1 to 1900 N.P.
ELECTRIC BOUIPMENT
ROCHETTER I, HEW YOU

10' X % MODINSON FOWER DEMACE 75 & 60 HP TEFC Motors—1200 RPM 30 Ton 75 Span OET Crane w/Motors 8/12/14/20 Ton Switching Locomotives 400 KVA GE Transformers — Rebuilt

3-400 KVA GF. Transformers — Rebuilt 1952 1-505' x 18" Belt Conveying Equip. Com-plete 1-100 KW 240/3/60 Gen. D/C NBC Engine 1-500 HP 600# P. B&W Boiler New 1946 H. & P., 6719 Etzel, 5t. Louis 14, Missouri

#### **ELECTRIC MOTORS** & GENERATORS

- New & Rebuilt A.C. & D.C. — Up to 1000 H.P. Large Stock — Full Guarantee \* IMMEDIATE SHIPMENT \* Our 46th Year of Service Catalog and Stock Lists on Request

ARTHUR WAGNER CO. Randolph & Ogden-Chicago 7, III.

#### **WANTED-Machinery & Plants**

Crushing, Grinding, Filtering, Screening and Rotary Drying Machines. Will consider set-up units or plants, for outright purchase or for continuing operation

P. O. Box 1351, Church St. Station New York 8, N. Y.

#### ADELPHIA EQUIPMENT CO.

PURCHASERS OF COMPLETE PLANTS OR INDIVIDUAL MACHINES 341 N. THIRD ST., PHILADELPHIA 6, PA. MArket 7-5026 LOmbard 3-7277

#### MOTOR GENERATOR SETS

750	KW	Allie.						3/60/440	
400	KW	West.	720	RPM	600	٧.	Syn.	3/60/2300	V.
300	KW	G.E.	1200	RPM	250	٧.	Syn.	2300/4000	V.
240	KW	G.E.						2300/4000	
225	KW	G.E.						2300/4000	
150	KW	G.E.						2300/4000	
100	KW	Ridg.	1200	RPM	250	٧.	Syn.	2300/4000	V.

#### A. C. MOTORS

	~.	U. MU	100	•	
HP	VOLTS	MAKE	TYPE	SPEED	WDG.
500	2200	G.E.	MT	450	S.R.
400	2200	G.E.	MT	450	8. R.
300	2200/4000	G.E.	1 M	450	S.R.
200	2200	G.E.	1 84	600	S.R.
150	220/440	G.E.	ATI	600	Syn.
100	(2) 440	G.E.	IM	450	S.R.
100	440	West.		900	Syn.

Large stock of smaller A.C. motors CRANE MOTORS 3-West, K5 with brakes Also 230 V. DC meters rated 400-200-125-75-60 HP

MOORHEAD ELECT. MACH'Y CO. P. O. Box 7991R — Pittsburgh 16, Pa.

FOR USED TRANSFORMERS

Convert your used transformers to cash! Send us a description of them TODAY. Transformers and Colls built to your specifications. Send blue-prints for prompt quotation.

TRANSFORMERS BOUGHT, SOLD and REPAIRED

#### THE ELECTRIC SERVICE CO.

5317 Hetzel St., Cincinnati 27, Ohio

## THOSON

FORMERLY ALBERT & DAVIDSON PIPE CORP. ONE OF THE LARGEST STOCKS IN THE EAST less and Welded 1/4" to 26" O.D.

All wall thickness Manufactured. Specialty large sizes. flanging -

Cutting — Threading Fittings — Valves. Call GEdney 9-6300 Stele St. & 2nd Ave., B'klyn. 32, K. Y.

#### STORAGE & PRESSURE TANKS LOCATED MO .- FLA .- N.J. & CONN.

-12,000, 17,000 & 20,000 Gal. 90 lb. 16-10.000, 15.000 & 20.000 Gal. Storage 9-42,000, 120,000 & 240,000 Gal. Stg.

TANKS BOUGHT & SOLD LESTAN CORP., Rosemont, Pa.

#### IN STOCK

28"/50" x 10' Nebel Sliding Bed Gap Lathe,

36" x 31' Centers Putnam 18 Speed Geared Head Lathe, P.R.T.

36" x 21' Centers LeBlond Lathe, 2 Car-

#D6 Colburn 36" Drill, 31/2" Cap., Compound Table.

#3 Kempsmith Univ. "Maximiller," #50 N.S.T., Timken Sp.

36" x 36" x 16' Cleveland Openside Planer.

#3 Cincinnati Vertical Miller, Timken Brg., Motor in Base.

#### THE O'BRIEN MACHINERY CO.

1527 N. DELAWARE AVE., PHILADELPHIA, PA. Bell Phone: GA 4-1150



### Ford, Bacon & Davis Engineers

CONSTRUCTION MANAGEMENT

**NEW YORK** 

APPRAISALS REPORTS

CHICAGO

: LOS ANGELES

Investigations and Reports



Appraisals Management

DESIGN

CONSTRUCTION

Industrials, Public Utilities, Process Plants ENGINEERING CONSULTANTS

NEW YORK

DAY & ZIMMERMANN, INC. PHILADELPHIA

CHICAGO

#### PALMER AND BAKER, INC.

CONSULTING ENGINEERS - ARCHITECTS NAVAL ARCHITECTS - MARINE ENGINEERS

Surveys—Reports—Design—Supervision—Consultation
Transportation and Traffic Problems
Tunnels—Bridges—Highways—Airports
Industrial Buildings
Waterfront and Harbor Structures
Graving and Floating Dry Docks
Vessels, Boats and Floating Equipment
Complete Soils, Materials and Chemical Laboratories

MOBILE, ALA.

NEW ORLEANS, LA. WASHINGTON, D. C.

HOUSTON, TEXAS

## WILEY & WILSON CONSULTING ENGINEERS

Steam and Electric Distribution, Power Plants, Municipal Planning, Water Supply, Sewage, Sewage and Water Treatment, Incinerators, Streets and Pavements, and Airports, Industrial Plants. Reports — Plans — Supervision

Main Office

905 Peoples Bank Bidg.

Lynchburg, Virginia

Richmond 20, Virginia

#### **WOOTEN & WOOTEN**

ENGINEERS & ARCHITECTS

INDUSTRIAL BUILDINGS — WAREHOUSES — STEAM PLANTS AIRFIELDS — WATER & SEWAGE WORKS 213-217 LATTA ARCADE CHARLOTTE, N. C.

#### Rader Engineering Co.

Water Works, Sewers, Refuse Disposal, Ports, Harbors, Flood Control, Bridges, Funnels, Highways, Airports, Traffic, Foundations, Buildings, Reports, Investigations, Consultations.

111 N.E. 2nd Ave., Miami 32, Florida

#### Harrington & Cortelyou

Consulting Engineers Frank M. Cortelyou

R. M. Newman
Movable and Fixed Bridges of All Types,
Foundations, and Related Structures.
1004 Baltimore
Kansas City 6, Mo.

#### Wiedeman and Singleton

Water works, sewens, sewage Disposal, appraisals, sewage Disposal, appraisals, valua-Tions, Reports
1305 Citizens & Southern National Bank Building ATLANTA, GA.

#### Gustave M. Goldsmith

Consulting Engineer General Structures
Plant Layout
Design-Investigation-Quantity Survey 1734 Bella Vista CINCINNATI 37, OHIO

#### International Engineering Company, Inc.

ENGINEERS Investigations — Reports — Des Procurement — Field Engineer Domestic and Foreign 74 New Montgomery St., San Francisco 5, California

#### Watson and Hart

consultants for Civil, Electrical, Mechanical and Textile Engineering Problem

GREENSBORO NORTH CAROLINA

#### Sverdrup & Parcel, Inc.

Consulting Engineers

Bridges, Structures and Reports, Industrial and Power Plant Engineer Syndicate Trust Bldg., St. Louis I, Me. 220 Bush St., San Francisco 4, Calif.

#### Hunting, Larsen & Dunnells Engineers

Industrial Plants—Warehouses Commercial Buildings—Steel and Reinforced Concrete—Design and Supervision—Reports

1150 Century Bidg., Pittsburgh 22, Pa.

#### Harza Engineering Co.

Consulting Engineers
L. F. Harza
E. Montford Fucik Calvin V. Davis E. Montford Fucik Caivin V. Davis Hydro-Electric Power Projects, Trans-mission Lines, System Management, Dams, Foundations, Harbor Structures, Soil Mechanics 400 W. Madison St., Chicago 6, Ill.

#### WIGHT And COMPANY

Airfields - Pavements - Sewerage Surveys - Reports - Municipal **Improvements** 

Downers Grove, III.

#### ROBERT AND COMPANY ASSOCIATES

Architects and Engineers

DESIGN • MODERNIZATION STUDIES • APPRAISALS MACHINERY LAYOUTS • AIR CONDITIONING POWER PLANTS

#### FREDERICK SNARE CORPORATION

Engineers-Contractors

HARBOR WORKS • BRIDGES • POWER PLANTS • DAMS • DOCKS AND TERMINALS.

DIFFICULT AND UNUSUAL FOUNDATIONS A SPECIALTY. 233 BROADWAY, NEW YORK CITY 7

HAVANA, CUBA: LIMA, PERU: BOGOTA, COLOMBIA: CARACAS, VENEZUELA; SAN JUAN, PUERTO RICO; GUAYAQUIL, ECUADOR.

#### RUMMEL, KLEPPER & KAHL

ENGINEERS

DESIGN—INVESTIGATIONS—REPORTS
Industrial Plant Development and Design
Water Treatment & Sewage Disposal Plants
Industrial Waste Disposal and Treatment Plants
Hulus Material Plants & Machinery Layout
Roads, Bridges, and Railroad Pacilities
1021 NORTH CALVERT STREET

BALTIMORE 2, MARYLAND

#### ASSOCIATED INDUSTRIAL ENGINEERS

Hopkins CONSULTANTS W. Terry Feild
CONSTRUCTION & PRODUCTION CONTROL
CONSTRUCTION & PRODUCTION CONTROL Ben W. Hopkins

COMMERCIAL — INDUSTRIAL — MUNICIPAL SALINGER BLDG., SUITE 214
NORTH LITTLE ROCK, ARK.

#### Frederic R. Harris, Inc.

CONSULTING ENGINEERS

F. H. Dechant, E. J. Quirin, E. H. Harlow Piers and Bulkheads Foundations, Soil Mechanics Sanitary and Industrial Waste Disposal

Water Supply, Flood Control Power, Industrial Plants, Buildings Power, Incum.

27 William Street
3 William Street
13 William Street
27 William Street
3 William Street
3 William Street
4 Newark
6 Newark
6 Fidelity Phila. Trust Bldg.
7 Philadelphia
8 San Francisco

#### Parsons, Brinckerhoff, Hall & Macdonald

Bridges, Highways, Tunnels, Airports, Traffic and Transportation Reports. Subways, Harbor Works, Dams, Canals, Power Projects, Industrial Buildings, Housing, Sewerage and Water Supply.

## WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS — CONSULTANTS

Civil — Sanitary — Structural Mechanical — Electrical orts, Plans, Supervision, Appraisals 1304 St. Paul St., Baltimore 2, Md.

#### Toledo Testing Laboratory

ENGINEERS—CHEMISTS

Concrete - Soils - Asphalt Inspection

Developm

Foundation Investigation Borings — Diamond Drilling — Load Tests

Soils Mechanics Laboratory 1810 North 12th St. Toledo 2, Ohle

#### Howard, Needles, Tammen & Bergendoff

Consulting Engineers

Bridges, Structures, Foundations Express Highways

921 Walnut Street 55 Liberty Street Kansas City 6, Mo. New York 5, N. Y.

#### W. W. Slocum & Co.

**ENGINEERS** 

Industrial — Design — Manage National Newark Building 744 Broad St., Newark 2, N. J.

SANDERSON & PORTER

ENGINEERS AND CONSTRUCTORS



#### THE BRADY CONVEYORS CORPORATION

Conveyors

20 West Jackson Boulevard

#### VIRGINIA ENGINEERING COMPANY, INC.

Government — INDUSTRIAL — Municipal

GENERAL CONTRACTORS NEWPORT NEWS, VIRGINIA

#### HOOSIER ENGINEERING COMPANY

Erectors of Transmission Lines 1384 HOLLY AVE., COLUMBUS, OHIO

#### Algernon Blair, Inc.

General Contractors

FIRST NATIONAL BANK BUILDING MONTGOMERY, ALA.

#### Duval Engineering & Contracting Co.

General Contractors

FOUNDATION BORINGS For Engineers and Architects

#### FROEHLING & ROBERTSON, INC.

Inspection Engineers and Chemists

RICHMOND



VIRGINIA

#### HARDAWAY CONTRACTING COMPANY

Contractors

Water Power Development, Bridges COLUMBUS, GEORGIA

#### GEMAR ASSOCIATES CONSULTING

#### MATERIALS HANDLING

ENGINEERS

Over 20 Years Experience Greenwich, Connec'icut

#### LAW-BARROW-AGEE LABORATORIES, INC.

LABUNALONIES, INC.
Soils Engineers and Consultants
Soil Testing—Soil Boring—Rock Drilling
-Load Testing—Field Control—Engineering Studies—Chemical Analysis—
Physical Testing
Box 1558, Atlanta 1, Ga.
Serving the entire South

## Mere payment of premiums does not insure

• It is easy to buy fire insurance but difficult to prove a loss. When fire occurs you must be able to prove what you lost and its cash value.

With Continuous American Appraisal Service, you will always be prepared.

#### The AMERICAN APPRAISAL



Company

Over Fifty Years of Service

OFFICES IN PRINCIPAL CITIES

## **NEW SALES PROSPECTS**

Most complete and up-to-date list of over 2,000 new industrial plants and plant expansions-proposed and completed-within the 16 Southern and Southwestern states during the last 12 months. Compiled by states and cities.

NEW AND EXPANDING PLANTS is an excellent and valuable sales prospect list for any company that sells to Southern business.

#### \$1.00 per copy

Send check or money order today for your copies of the

> 1953 Edition of NEW AND EXPANDING PLANTS

A Business Service Publication of MANUFACTURERS RECORD Baltimore 3, Maryland

### THE BELMONT IRON WORKS

Engineers-Fabricators-Erectors-Contractors-Exporters

STRUCTURAL STEEL BUILDINGS & BRIDGES RIVETED - ARC WELDED

SHOPS: PHILADELPHIA - EDDYSTONE - ROYERSFORD Cable Address - Beliron



Main Office-Philadelphia 46, Pa. w York Office-44 Whitehall St., N. Y. 4, N. Y.

#### POWER PLANTS---WATER WORKS

Contractors **BURFORD, HALL & SMITH** 

140 Edgewood Ave., N. E. Atlanta, Georgia

#### amental and Industrial



PERFORATED

Send for Our Catalogue



Manhattan Perforated Metal Co., Inc., 43-17 37th St., L. I. City, N. Y.

## INDEX FOR BUYERS

Page Numbers Indicate Where Products Can Be Found

63	Forgings (Steel)	53	Professional Directory62,	63
62	Galvanizing14, 53,	60	Railroads	49
19	Gas (Natural)	8	Roofing	22
63	Grating (Steel)	58	Screens	65
65	Insurance	20	Sheets (Steel, Galvanized)21,	64
62	Lead Installations	60	Sites (Industrial) 12, 14, 23, 24, 49, 51, 55,	61
60	Lumber (Creosoted)22,	65	Stampings (Steel)	53
63	Lumber (Salt Treated)	22	Steel Fabricating	
15	Machinery (New and Second-		4, 14, 19, 60, 63	67
63		61	Steel Products2, 17, 21, 53,	67
	Metals (Non-Ferrous)	54	Steel (Stainless)	64
	Perforated Metals60, 63	, 65	Structural Steel	
63	Petroleum Products	3	4, 14, 19, 60, 63, 64,	67
68	Piling, Poles, etc.		Tanks and Towers6,	6
62		, 65	Telephone Service	47
, 63	Pipe (Cast Iron)	60	Treads (Stair)	51
55	Pipe Forms	65	Tubing (Steel)21,	6
20	Power Plants	63	Water Supply	6
	62 19 63 65 62	62       Galvanizing       14, 53,         19       Gas (Natural)	62       Galvanizing       14, 53, 60         19       Gas (Natural)       8         63       Grating (Steel)       58         65       Insurance       20         62       Lead Installations       60         60       Lumber (Creosoted)       22, 65         63       Lumber (Salt Treated)       22         15       Machinery (New and Second-Hand)       61         63       Metals (Non-Ferrous)       54         63       Perforated Metals       60, 63, 65         63       Petroleum Products       3         65       Piling, Poles, etc.       (Creosoted)       22, 65         63       Pipe (Cast Iron)       60         55       Pipe Forms       65	62       Galvanizing       14, 53, 60       Railroads         19       Gas (Natural)       8       Roofing         63       Grating (Steel)       58       Screens         65       Insurance       20       Sheets (Steel, Galvanized)       .21,         62       Lead Installations       60       Sites (Industrial)       12, 14, 23, 24, 49, 51, 55,         60       Lumber (Creosoted)       .22, 65       Stampings (Steel)         63       Lumber (Salt Treated)       .22         53       Machinery (New and Second-Hand)       .61       Steel Fabricating         63       A, 14, 19, 60, 63       .63         64       Perforated Metals       .60, 63, 65       Structural Steel         63       Petroleum Products       .3         64       Piling, Poles, etc.       .6       Tanks and Towers       .6         62       (Creosoted)       .22, 65       Telephone Service         63       Pipe (Cast Iron)       60       Treads (Stair)         55       Pipe Forms       65       Tubing (Steel)       .21,

## STEEL

#### NEARBY STOCKS INCLUDE:

BARS—Carbon & alloy, hot rolled & cold fin., reinforcing STRUCTURALS—I beams, H beams, channels, angles
PLATES—Sheared & U. M. Inland 4-Way Floor Plate
SMEETS—Many types

TUBING—Seamless & welded mechanical & boiler tubes STABRIESS—Allegbeny sheets, plates, barry, tubes, etc.

BABBITT—bearing metal MACHINERY & TOOLS—for metal fabrication

## In Stock—Prompt Delivery

Some steel products are in short supply but our over-all stocks are still large and diversified.

For a single piece or a carload, call our nearest plant. Joseph T. Ryersea & Son, Inc. Plants: New York, Boston, Philadelphia, Datroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles, San Francisce, Seattle and Spokane.

## RYERSON



## STEEL BUILDINGS

Built Quicker . . . To Last Longer . . .

... But They Cost Less

- Customed Engineered
- Can Be Furnished Insulated
- Constructed of Std. Sections
- 100% Salvage

Experience and sound engineering are the best foundation for steel buildings. Consult ALLIED STEEL before you buy!

WRITE FOR CATALOG

ALLIED STEEL Buildings are constructed of standard sections ideal for any of your building needs. When you buy an ALLIED building you have a structure that can be lengthened, shortened-or movedwith almost 100% of the original material salvaged. They're built to last a long, long time, quickly erected anywhere, but they cost less because they're custom built from inexpensive standard sections. ALLIED STEEL buildings can be furnished insulated or with asbestos covered roofs.

ALLIED STEEL PRODUCTS CORP. 2100 N. LEWIS TULSA. OKLAHOMA



.

## luinn Standard

#### FOR CONCRETE PIPE

The Quinn Standard is known as the best the world wherever concrete pipe is produced and Backed by over 35 years' service in the of hundreds of Quinn-educated contractors, municipal departments and pipe manufact who know from experience that Quinn pipe and Quinn mixing formulas combine to pro the finest concrete pipe at lowest cost.

#### QUINN HEAVY DUTY PIPE FORMS

For making pipe by hand methods by either the wet or semi-dry processes. Built to give more years of service—sizes for pipe from 10" up to 120" and larger—longue and groove or bell end pipe at

Also manufacturers QUINN CONCRETE PIPE MACHINES

QUINN WIRE & IRON WORKS 1605 12"ST BOONE, IA



#### "SERVING SOUTH" THE

Storage tanks — Pressure vessels Welded steel plate construction

#### **BUFFALO TANK CORPORATION**

Fairfield Plant - P. O. Box 475 **Baltimore**, Maryland

#### **EPPINGER & RUSSELL CO.**

WOOD PRESERVERS SINCE 1878

80 EIGHTH AVENUE NEW YORK 11, N. Y.

Clean Pressure Treated TIES - POLES - PILING - LUMBER

75 Years' Experience in the Preservation of Forest Products

TREATING PLANTS

JACKSONVILLE, FLA. . EDDINGTON, PA. NORFOLK, VA.

## PERFORATED METALS For every purpose, Industrial and Ornamental

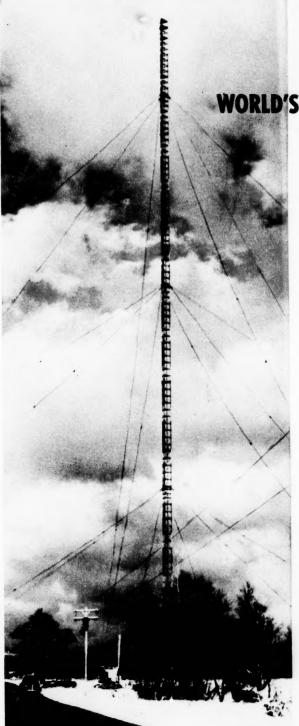
Steel, Stainless Steel, Monel Metal, Brass, Copper, Bronze, Aluminum, Zinc, Lead, Tin Plate and all other metals or materials perforated as required, and for all kinds of screens. Send for new Catalog.

**CHARLES MUNDT & SONS** 

....

## INDEX TO ADVERTISERS

Agency—Batten, Barton, Durstine & Osborn	65	GLAMORGAN PIPE FOUNDRY COMPANY GOLDSMITH, GUSTAVE M GULF POWER CO  —H— H & P MACHINERY COMPANY	62 23	QUINN WIRE & IRON WORKS	65
Agency—Sparrows Advertising Agency Agency—Advertising Engineers Muerican Appraisal Corporation Agency—The Buchen Co. American Bridge Div., U. S. STEEL CORP. Agency—Batten, Barton, Durstine & Osborn	65	GULF POWER CO	23	-R	
Agency—Advertising Engineers MMERICAN APPRAISAL CORPORATION Agency—The Buchen Co. MMERICAN BRIDGE DIV., U. S. STEEL CORP. Agency—Batten, Barton, Durstine & Osborn	63	-H-		—R— RADER ENGINEERING CO	
AMERICAN APPRAISAL CORPORATION Agency—The Buchen Co. MERICAN BRIDGE DIV., U. S. STEEL CORP. Agency—Batten, Barton, Durstine & Osborn		H & P MACHINERY COMPANY		RADER ENGINEERING CO	
AMERICAN BRIDGE DIV., U. S. STEEL CORP. Agency—Batten, Barton, Durstine & Osborn	19	H & P MACHINERY COMPANY		RADER ENGINEERING CO	
Agency—Batten, Barton, Durstine & Osborn	19		61	REPUBLIC STEEL CORP	
Osborn		HARDAWAY CONTRACTING COMPANY	63	Agency-Meldrum and Fewsmith, Inc.	
MERICAN CREATOR WARM		HARRINGTON & CORTELYOU	62	ROBERT AND COMPANY ASSOCIATES	
MERICAN CREOSOTE WORKS		HARZA ENGINEERING CO	62	Agency-Liller, Neal & Battle	
Agency-N. W. Ayer & Sons, Inc.		HEINEKEN, W. P		Agency—Fuller & Smith & Ross	22
ARMCO DRAINAGE & METAL PRODUCTS Agency—N. W. Ayer & Sons, Inc.	57	Agency-L. F. McCarthy & Co.		RUMMEL, KLEPPER & KAHL	
RUNDEL CORP	_	HOOSIER ENGINEERING COMPANY HOWARD, NEEDLES, TAMMENT &	63	Agency—Aubrey, Finlay, Marley &	64
ASSOCIATED INDUSTRIAL ENGINEERS		BERGENDOFF		Hodgson	
Agency-Lowe & Stevens, Inc.	33	HUNTING, LARSEN & DUNNELLS	62		
				SANDERSON & PORTER	62
-1-		— <del> </del> —		Agency—Calkins & Holden	
ELMONT IRON WORKS	63	Agency—J. P. Dewey	14	Agency—William Cohen Advertising	60
SETHLEHEM STEEL CO		INGALLS IRON WORKS CO	-	Agency	
Agency—Jones & Brakely, Inc.	15	Agency—Parker & Associates INTERNATIONAL ENGINEERING CO	62	SEABOARD AIR LINE RAILROAD COMPANY Agency—The Caples Co.	_
Agency—Benton & Bowles, Inc.		INTERNATIONAL MIN. & CHEM. CORP Agency—C. Franklin Brown, Inc.	_		62
OX 5020, BILTMORE, N. C	61	and the resident brown, Inc.		SNARE CORPORATION, FREDERICK SOUTH CAROLINA ELECTRIC & GAS CO	62 55
RADY CONVEYORS CORP	63	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Agency—Tobias & Co.	23
BRISTOL STEEL & IRON WORKS, INC				Agency-Liller, Neal & Battle	
BURFORD, HALL & SMITH	63	Agency—C. P. Clark, Inc.	-	SOUTHERN LEAD BURNING CO	60
Agency—H. Lee Hoffman Advertising	Inc.	KINNEAR MFG. CO	5	SOUTHERN RAILWAY SYSTEM	_
Agency—Aubrey, Finlay, Mariey &		ingency whether, highe to damey		Agency—Cunningham & Walsh, Inc. STANDARD STEEL SPRING COMPANY	50
Hodgson				STONE & WEBSTER ENGINEERING CORP	
		LAW BARROW & ACCT LABORATORIES		Agency—Harold Cabot & Co. SVERDRUP & PARCEL, INC	42
_c_		LAW, BARROW & AGEE LABORATORIES,	63		-
CATTIE & BROTHERS, JOSEPH P		LESTAN CORP	61	-7-	
Agency—Russell T. Gray, Inc.	6			TENNESSEE COAL & IRON DIV	
Agency—Albert Frank-Guenther Law	3	<b></b>		Agency—Batten, Barton, Durstine &	
COMMERCIAL ENVELOPE CO		MAHON COMPANY, R. C	68	Osborn TOLEDO TESTING LABORATORY	6
Agency—Robert Luckie & Co.	2	MANHATTAN PERFORATED METAL CO		TRINITY PORTLAND CEMENT DIVISION Agency—Harris & Bond, Inc.	
agency thousand a con-		MISSISSIPPI POWER CO		rigency—Harris & Bond, Inc.	
<b>-D-</b>		Agency—J. Howard Allison & Co.		_1 _	
DAVIDSON PIPE CO., INC		MOORHEAD ELECT. MACH'Y CO MUNDT & SONS, CHARLES		UNION TRUST COMPANY OF MARYLAND	
DAY & ZIMMERMANN, INC	62			U. S. PIPE & FOUNDRY COMPANY	
Agency—Frederick B. Garrahan	60	_N_		Agency—H. B. Humphrey, Alley & Richards, Inc.	
Agency—Ketchum, McLeod & Grove	20	NASHWILLE PRINCE CO	14	Agency—Batten, Barton, Durstine &	19
DUVAL ENGINEERING CO		NASHVILLE BRIDGE CO	14	Osborn Batten, Barton, Durstine &	
		Agency—Houck & Co. NORTH CAROLINA DEPT. OF			
		CONSERVATION AND DEVELOPMENT	51	_v_	
EATON & BELL		Agency—Bennett Advertising, Inc. NORTH CAROLINA GRANITE CORP	_	VIENER & SONS, HYMAN	54
Agency—Charles R. Rumrill Co.		Agency—Houck & Company	41	VIRGINIA ENGINEERING COMPANY, INC	
ELECTRIC SERVICE COMPANY	61	NO. 9802	61		
Agency—S. C. Baer Co. ELFER, LUTHER L	61			_w_	
EPPINGER AND RUSSELL COMPANY	65	-0-		WACHOVIA BANK & TRUST CO	
		O'BRIEN, CLARENCE J	61	WAGNER COMPANY, ARTHUR	
		O'BRIEN MACHINERY CO		WEBER & CO.	
FISHER COMPANY, ADAM	v≅.	OLES ENVELOPE CO.		WHITMAN, REQUARDT & ASSOCIATES	
Agency-Shaffer-Brennan-Margulis Ad	42	O'NEAL STEEL WORKS		WIEDEMAN & SINGLETON, INC	6: 4:
FISHER COMPANY, ADAM Agency—Shaffer-Brennan-Margulis Ad FORD, BACON & DAVIS, INC.	-				6
Agency—Shaffer-Brennan-Margulis Ad FORD, BACON & DAVIS, INC. Agency—Victor A. Smith FROEHLING & ROBERTSON				WILEY & WILSON	
FORD, BACON & DAVIS, INC				WISCONSIN MOTOR CORPORATION	5
FORD, BACON & DAVIS, INC		PALMER & BAKER, INC	62	WILEY & WILSON WISCONSIN MOTOR CORPORATION Agency—Paulson-Gerlach & Associates WOOTEN & WOOTEN	
FORD, BACON & DAVIS, INC.  Agency—Victor A. Smith FROEHLING & ROBERTSON	63	PALMER & BAKER, INC. PARSONS, BRINCKERHOFF, HALL & MacDONALD	62	WISCONSIN MOTOR CORPORATION  Agency—Paulson-Gerlach & Associates	
FORD, BACON & DAVIS, INC.  Agency—Victor A. Smith FROEHLING & ROBERTSON	63	PALMER & BAKER, INC.		WISCONSIN MOTOR CORPORATION  Agency—Paulson-Gerlach & Associates	



Here's the "Low-Down" on the WORLD'S SECOND TALLEST STRUCTURE

Higher than Eiffel Tower (984 ft.)... higher than the Chrysler Building (1045 ft.)... the world's second tallest structure is the 1218-foot U. S. Air Force radio tower near Forestport, N. Y. Still champion is the Empire State Building with its TV antenna (1472 ft.).

This latest entry in man's sky-climbing contest is one of three 1218-foot U.S.A.F. towers engineered and manufactured by Republic's Truscon Steel Division. It was designed to take a sway of seven feet at wind velocities up to 150 miles-per-hour. Before completion the tower was lashed by 120-mile icy gales. The quality of both steel and engineering was proved when this premature test induced a sway of less than four feet in the towering equilateral triangle.

That engineering, that metallurgy, that fabricating technique which were proved a quarter mile up can be applied for you in whatever direction your business happens to lie. They're a primary part of REPUBLIC'S service to all customers:

- 1. to produce thousands of kinds of steels and steel products—the best possible;
- then to specify an exact recommendation for your particular needs (not just to fill an order for steel);
- and to stay with our product to see that your product has been fabricated or processed with the utmost economy and efficiency.

Radio towers are only one sphere in which Republic pioneers—not only in the development, but in design and application of steels.

When your future thinking arrives at the word "steel," why not substitute the word REPUBLIC? It's the modern symbol of

3-Fold Service for Steel Users

## REPUBLIC STEEL

GENERAL OFFICES . . . CLEVELAND I, OHIO

VORLD'S WIDEST RANGE OF STEELS AND STEEL PRODUCTS



## Rolling Steel

CHAIN-GEAR

OPERATOR

DOORS

Manually, Mechanically, or Power Operated

A good, quick opening, quick closing, power operated rolling steel door offers more desirable features than any other type of door. The vertical roll-up action of a rolling steel door utilizes no usable space either inside or outside the opening . . . there are no overhead tracks or other obstruction to interfere with crane operations. No other type of door offers these inherent advantages of space economy and compactness in operation. In addition, rolling steel doors are permanent their all-metal construction assures you a lifetime of trouble-free service, and provides maximum security against intrusion and fire. When you select a rolling steel door, check specifications carefully . . . you will find many extra-value features in Mahon doors -for instance, the galvanized steel material, from which the interlocking curtain slats are rolled, is chemically cleaned, phosphated, and treated with a chromic acid solution to provide paint bond, and, the protective coating of synthetic enamel is baked on at 350° F. prior to roll-forming. See Sweet's Files for complete information including Specifications, or write for Catalog G-53.

THE R. C. MAHON COMPANY

Detroit 34, Michigan • Chicago 4, Illinois • Representatives in all Principal Cities

Manufacturers of Ralling Steel Doors, Grilles, and Automatic Closing Underwriters' Labeled Ralling Steel Doors and Fire Shutters; Insulated Metal Walls and Wall Panels; Steel Deck for Roofs, Partitions, and Permanent Concrete Floor Forms.

Steel Deck for Roofs, Partitions, and Permanent Concrete Floor Forms.

ROLLING STEEL DOORS, SHUTTERS AND GRILLES TO MEET EVERY REQUIREMENT

Three of fifteen Mahon Rolling Steel Doors installed in a large midwest foundry. Spence Brothers, Saginaw, Mich., Gen'l Contractors.

MAHON STANDARD POWER OPERATOR 920-P

MAHON